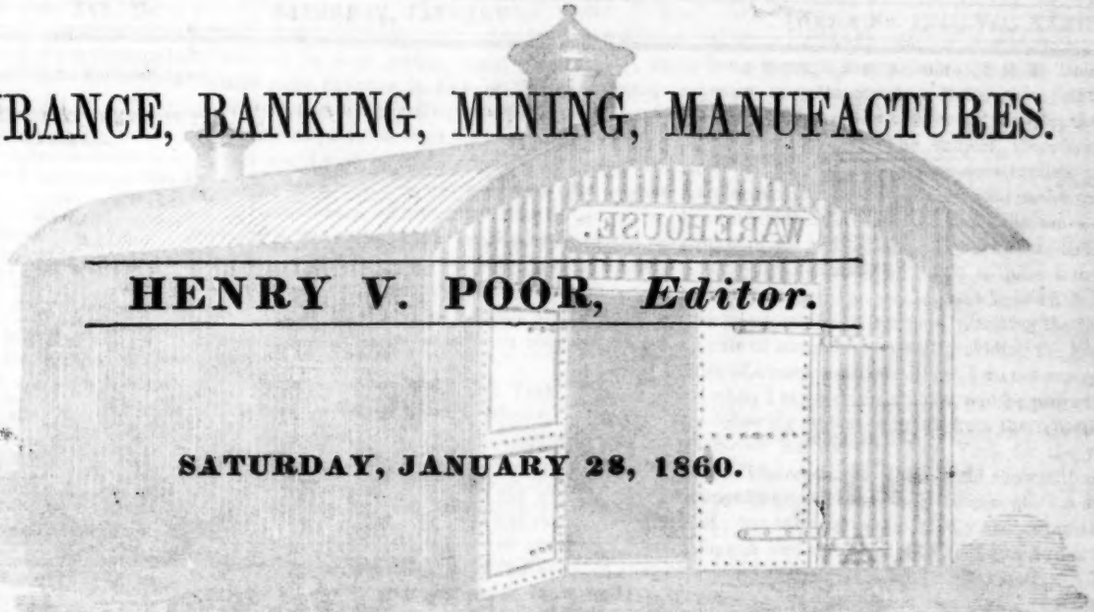
AMERICAN

RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.



HENRY V. POOR, *Editor.*

SATURDAY, JANUARY 28, 1860.

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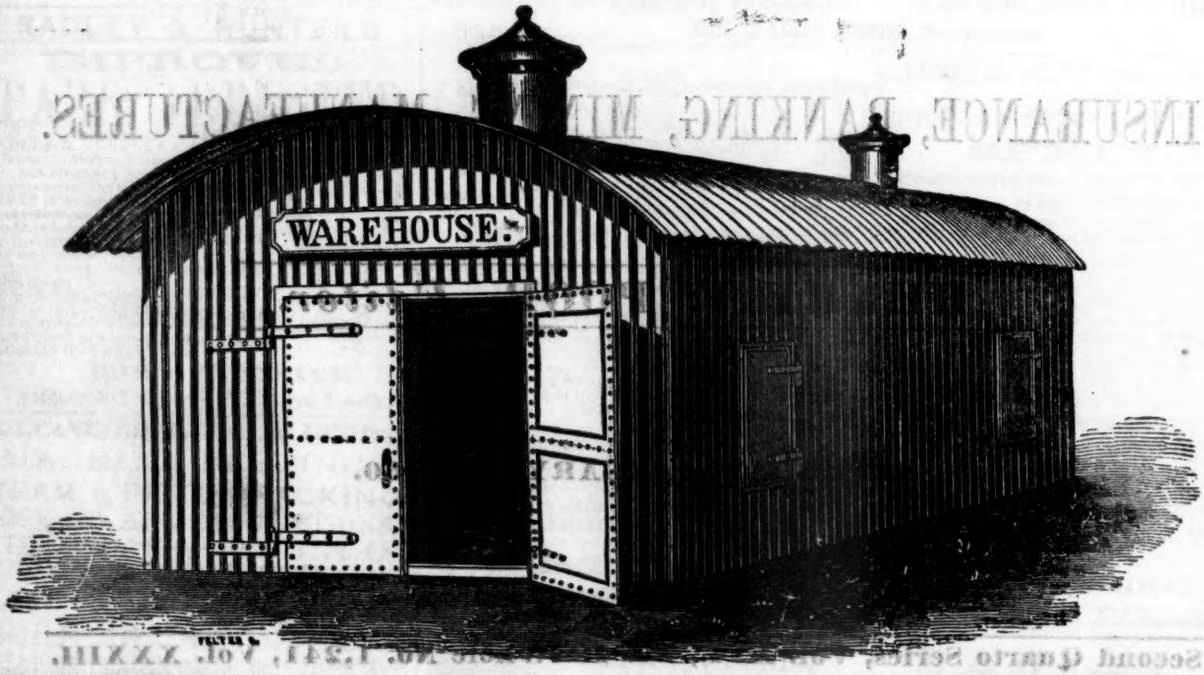

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, January 28, 1860.

Street Railways in New York.

To F. A. CONKLING, ESQ., *Member of Assembly from the City of New York.*

SIR:—The modern invention of Street Railways, instead of being controlled and managed in a manner worthy of an improvement so manifest and important in the transportation of passengers between distant points in large cities, has so far served only the purposes of speculation for shrewd and managing schemers. Instead of realizing to the public the full benefits which ought to result from their undisputed right to use all the mechanical expedients involved, (for there is no question of patents at issue, so far as the main features of street railways are concerned,) these facilities, and the routes for their use, have been to this time forestalled and monopolized by a few associations of individuals, who, by all sorts of lobbying and legislature chicanery, have obtained grants through many of our principal thoroughfares, with the right to collect a toll so far beyond the cost of service rendered, that what otherwise would be an invaluable public blessing, is fast becoming an unbearable imposition. Their claim to the use of these routes, and to the collection of the exorbitant fares allowed by their grants, might be submitted to with more patience, in view of the indispensable conveniences which railways furnish, if the accommodations provided were not most execrable.

It would seem to be unnecessary to argue at any length the advantages street railway cars possess over omnibuses. Their superiority in every respect, whether as to their mechanical features or their convenience to the passenger, or the public, admits of no dispute. They have become a necessary part of the machinery of a great city, and could no more be dispensed with than our gas or our water works.

The street railways of New York during the year 1858 carried about 35,000,000 passengers. To transport this number in omnibuses would have required about 900 more of these vehicles than we now have running in our streets. It is easy to conceive what, with this additional number, would have been the condition of our great thoroughfares, both in regard to the state of their carriage ways and the passage of other vehicles. As it is at present, Broadway is but one great procession of omnibuses; everything else is overshadowed by them; and the crossing of the street by a pedestrian, is a feat requiring long practice, combined with the greatest agility.

It is not, as I before stated, my present aim to advocate the superiority of cars over omnibuses. Street railways are no longer an experiment; and I only refer to this question as warranting the assumption, that, before long, the facilities afforded by railways must be extended over the entire city. Nothing can arrest their progress; but it is, and has been, retarded by the fact that the consummation desired is not approached, as a great public measure and for the public benefit, but by separate and isolated schemes, for the purposes of public plunder, and without any plan for a *system* for the whole city. In the scramble for spoils, each faction, to a certain extent, for a year or two past, has had power to defeat the schemes of the other, and those who have had patriotism enough to wish for, and foresight to see the necessity of, a general system, have been obliged to stand by and see the Kilkenny fight, contented that no more harm has been done, and no more barriers thrown in the way of the desired end. That renewed attempts will be made, at this session of the Legislature, to force through several more of these isolated schemes, is quite certain. Every new grant of this kind, is but a new barrier to the adoption of a thorough system. The subject, therefore, of street railways—their cost of construction, their maintenance and their profits—should be thoroughly ventilated, before every opportunity for a correction of the evils complained of, is lost; and the control of our avenues of travel to pass into the hands of the greedy speculators, whose whole aim is to monopolize this business, receiving the highest rate of compensation, and providing the lowest order of accommodation. That I do not exaggerate when I say *exorbitant* fare, will be proved by the following tables, deduced from the reports of the Street Railways of New York for the year 1857. The reports for 1858 would show still more extraordinary statements, if they could be analyzed; but they are so designedly and ingeniously befogged and muddled in the figures, that the items cannot well be got at separately. The Fourth Avenue road is not included in the statement, as the company makes no report of its street business, separate from the operations of the Harlem road. The Ninth Avenue road was not then in operation.

Avenue.	Length.	No. of cars.	Cost of do.	No. of horses.	Cost of do.	Cost of real estate, &c.
8th.	4.89	61	$48,800	471	$77,500	$207,124
6th.	4.00	98	61,101	354	71,927	166,915
3d .	6.00	71	50,000	529	80,000	40,000
2d .	8.00	58	43,500	368	55,200	40,000
Tot.	22.89	288	$203,401	1,722	$284,627	$454,039

Avenue.	Total cost of track, &c.	Cost per mile of do.	Cost per mile of all items.	Total cost.
8th ...	$475,000	$97,137	$164,000	$808,424
6th ...	555,012	138,750	213,989	855,957
3d	1,000,000	166,666	195,000	1,170,000
2d	764,664	82,578	109,374	903,364
Totals.	$2,794,676	$122,100 Average.	$163,300 Average.	$3,737,745

The total number of miles embraced in the statement is nearly 23—the average cost of which is represented at $163,300 per mile; making a grand total of $3,737,745, upon which the public are expected to pay from 8 to 12 per cent. dividends.

Does any sane man believe that these roads actually cost one-third of that amount? The following statement will give in round figures and with liberal margins, the sums for which these roads were, or ought to have been, built and equipped:

288 cars, at $700 each	$201,600
1,722 horses and harness, at $150 each	258,300
Real estate	300,000
22.89 miles track, $15,000 per mile	358,350
Total	$1,118,250

—or an average, per mile, of about $49,000.

This is less than one-third of the cost reported—the difference being, in gross, $2,619,495.

Now there is not a practical railroad man in existence who will not assert that, with *one* million dollars, he could commence to day, and within six months, construct and equip 23 miles of better roads, with better cars, better horses, and better accommodations in every respect.

So much for the cost of these roads. There is no dodging the facts. The figures stand out so that there is no mistaking them. Where it is represented that a mile of street rails, laid down in the pavements, cost $122,000, as an average for all the roads, without a dollar's worth of grading, and without the equipment of a single horse or car, he must, indeed, be a man of large credulity who can swallow such a statement. The articles of cost of track are few and simple. A very excellent street railway may be constructed for the following sums:

100 tons of rails	$5,000
80,000 feet timber (B. M.)	1,600
Spikes, &c.	100
Labor, laying down	800
Cost one mile single track	$7,500

—or $15,000 for double track.

This is a fair cost under the old plan of construction, with the clumsy sills and cross-ties, which experience has shown to be not only of no use, but a positive evil, entailing constant repairs and renewals, and obstructing the streets with the rubbish. A still better road than any in use in New York, can be laid at even a less cost.

The fairness of the estimate presented as the actual cost of street railways, is sustained by the reports of the Brooklyn City Railway Co., which, for the year 1857, stands as follows:

100 cars	$85,803
900 horses	185,502
Real estate	224,582
Tracks and grading	580,121
Total for 20½ miles	$1,026,008

—equal to an average of $50,000 per mile, and this too, with the cost of tracks represented at $28,819 per mile, or more than $10,000 per mile in excess of their actual cost.

The fact then cannot be disguised that the public of New York City are now paying to the railway companies at least $350,000 per annum, interest, on an entirely fictitious capital; for the reports for 1858, show the following earnings and expenses

Avenue.	Total cost of oper'n.	Total receipts.	Net receipts.	Pr. ct. on the rep'ted cost.
8th	$177,753	$338,410	$160,657	21.35
6th	178,226	280,617	102,391	11.98
3d	242,811	403,055	160,244	11.62
2d	119,704	227,457	107,753	10.72
	$718,554	$1,249,539	$531,045	13.30 Av'ge.

From this it will be seen that the average net earnings were 13⅓ per cent. on the reported cost, or over 40 per cent. on their actual cost. Does anything in the annals of speculation, upon a lamb-like enduring public, show like this? Let it be understood that this is an average statement. If we take an isolated case, we shall find still more astounding results. In the report for the year 1858, the Eighth Avenue road is represented to have cost $756,142—its entire length being five miles. It earned net, after paying every expense, $160,657, or 21.35 per cent. on its diluted capital.

A fair cost for this road would have been $250,000, so that it actually earned in that year 64 per cent! ! !

Take the Third Avenue road alone, and we find its cost, for six miles in length, reported to be $1,378,000, or at the rate of $229,682 per mile! ! ! Its net earnings for 1858 were $160,244—equal to 11⅔ per cent. on this enormous valuation; and 53 per cent. on its probable cost.

If we assume 10 per cent. to be a liberal dividend on investments of this character, it is not a difficult matter with these results to estimate the value of the grants which have been so rapaciously swindled from the public.

We have shown the real cost of these 23 miles of railroad to have been not far from $1,000,000; but to be liberal, let us call it $1,200,000—10 per cent. per annum on this amount would be $120,000. They actually earned net, as has been shown, $531,000, or $411,000 more than this amount. Capitalizing this excess at 10 per cent. per annum, and the result is, that the public have given to these companies privileges which are worth $4,110,000, or $180,000 for every mile of rails which have been laid down in the streets. With such facts staring us in the face; with the certainty before us that we have already saddled ourselves with a burden of taxation of nearly half a million dollars per annum, with no earthly benefit; and that in addition to squandering this annual sum upon a set of soulless corporations, made up of selfish and grasping individuals, we permit them to impose upon us in every conceivable shape, will the system longer be permitted? Will a Representative of the people in the Legislature of this State, with a knowledge of these matters, that no man who makes pretensions to a reasonable modicum of common sense dare deny, so far disregard every obligation of his position as to vote for any further grants of this nature.

That additional railways are required, and that more must be constructed, admits of no doubt; but when the public disposes of the routes, the public should have a *quid pro quo*. I do not mean to be understood that I am in favor of selling these grants even at what I have shown them worth. The money received for them would be but a new placer for the spoilsmen. As the five cent. rates would, under such a valuation, be still continued, it would amount strictly to a poll tax upon every passenger. It would be an unjust discrimination upon the class who ride in the cars, for the benefit of those who can afford more aristocratic vehicles.

The grant for such a system should be given not to the highest, but the lowest bidder—to that party who will give the greatest conveniences with the lowest fare.

Let us see what the fare should be. The following table shows the aggregate result of the operations for 1858 of the four roads referred to as compared with 1857:

Year.	Cost of Operation.	Receipts.	Net Receipts.	No. of Pass. car'd.
1857	$1,051,369	$1,587,581	$536,212	31,783,068
1858	1,007,265	1,659,534	652,269	32,535 506
Inc...	*$44,104	$71,953	$136,057	753,438

* Reduction.

	Cost of each passenger.	No. of miles run by cars.	Cost per mile run.	Net rec'ts per cent.
1857..	3.3 cts.	6,420,444	16.37 cts.	11.3
1858..	3.1 cts.	6,332,889	15.93 cts.	13.
Reduc.	0.2 cts.	87,555	0.44 cts.	*1.7

* Increase.

It will be seen that the cost in 1858 for every passenger carried was 3.1 cents; the reduction of cost from previous year being 6 per cent. Improvements in the management of these roads, and the economy which would naturally be exercised under a reduced rate of fare, but which is never used when such exorbitant profits are realized as at present, would no doubt reduce the cost to 2½ cents. But for the sake of the argument let us take 3 cents as the minimum. It would then cost to carry 35,000,000 passengers $1,050,000. Estimating a fair cost for these roads to be $1,200,000, and the net receipts to pay 10 per cent. should be $120,000. Add this to the above cost of operation and maintenance, and we have $1,170,000 as the gross receipts required. This would be obtained at a fare of 3⅓ cents per passenger. Every person now riding in these cars is therefore paying 50 per cent. more than the value of the service rendered him. True, a fare of 3⅓ cents is not practicable as a single rate, but it is practicable in packages of tickets. At a fare of four cents, the profits on 35,000,000 passengers would be $350,000, or about 30 per cent. on a liberal cost for these roads.

There is margin enough at a 4 cent rate to give us far superior accommodations. It would furnish us a place to sit. It would relieve us from being hung upon *straps*, and squeezed into a jelly, two or more times a day. The comfort and conveniences of our cars might be so enhanced that the cost for carrying each passenger could be increased to 3⅔ cents, and yet enough net receipts be left from a 4 cent rate to pay 10 per cent. The time must come when at least double the number of miles of railways we now have will be laid down in the streets of New York. Take the map of the city, and lay down upon it all the various stage routes which are now in operation, and then lay down a system of railways which will furnish far greater facilities, and it will be found to require not more than 40 miles in addition to the present roads. This can be done in such a way that a passenger may find a car to carry him between almost any two points he desires, at a single fare, without (as the saying is) making a gridiron of the city. This is what is required, and this can and will be carried out, unless all control is lost by suffering ourselves to be saddled by a few more of these gratuitous, 5 cent grants. How much better then, to commence now, with a well digested comprehensive plan, or if it is not advisable to carry it all out at once, at least commence with a view to its ultimate completion.

Forty miles of railways will be constructed within the next five years beyond a doubt, either at a fair cost, and 4 cent rates, or else at the usual average

of $100,000 to $250,000 per mile, with 5 cent rates.

Such a system as is here proposed, at 4 cent rates, would change the rates on the existing roads.

This 70 miles of railway would banish the outlandish omnibusses from all but a few side routes, and nearly the entire travel would be in cars. Who can doubt but that the number passengers carried would keep pace with the facilities. If the 30 miles now in operation carry 35,000,000 passengers, 70 miles will beyond a doubt carry 80,000,000. At 4 cent rates, the saving to the community would be $800,000 per annum in fares alone, besides as much more in the wear and tear of our pavements.

It is simply a question whether this enormous annual sum shall be forced from the public to glut the coffers of four or five soulless corporations, while we continue to ride in their dirty and crowded cars; or whether we shall keep the control and ride comfortably and quietly in clean vehicles, not only up and down through our longitudinal streets, but in almost any direction we may choose. The details of such a system are not at all complicated, and properly laid out, it need not interfere with or embarrass other travel, nor need Broadway be disturbed; and yet the great problem "how to relieve this thoroughfare" would be solved. The question as to the manner in which the various routes, forming such a system, could be determined on, and conflicting interests harmonized, I do not propose to discuss; but I believe that all this can easily be accomplished, if the public can only be awakened from its Rip Van Winkle sleep upon this subject. The difficulties surrounding this question will vanish as they are approached.

When the routes are fixed upon, so as to accommodate the greatest amount of population with the fewest number of miles, then let the right to construct and operate them be put up for public competition, and given to those parties who, under the proper guarantees, and under stringent conditions as to the character of the vehicles, the frequency and direction of the trips, the accommodations given to each individual passenger, &c., &c., will carry at the lowest rates of fare.

I believe a multitude of such parties could be found who would grasp at such grants at 4 cent fares with a reduction to 3 at the end of 5 years. This is the way in which the capabilities of street railways, as a great public convenience, can be most fully developed, and their benefits equitably and properly distributed, without laying a tribute upon the poor man's ride, either for the benefit of a purse-proud railroad corporation, or to lessen the taxes of that class of the community who can ride in their carriages.

Very truly yours,

CIVIL ENGINEER.

Chicago, Iowa and Nebraska Railroad.

The following is a statement of the earnings and expenses of this road during the last seven months of 1859:

	Earnings.	Expenses.	Difference.
June	$9,668 50	$5,208 87	$4,459 63
July	9,189 09	4,323 42	4,865 67
August	8,352 87	5,019 62	3,333 25
September	12,998 48	6,565 14	6,433 34
October	17,648 72	5,746 57	11,902 15
November	16,013 97	6,143 73	9,870 24
December	11,457 67	5,550 17	5,907 50
	$85,329 30	$38,557 52	$46,771 78

Steam Engineering in 1859.

(Continued from p. 864.)

STEAM GENERATION.—In the introductory remarks, our readers will have noticed how carefully any exaggeration has been avoided in speaking of *possible* economics in generating and using steam; and we have taken this course, knowing there are many practical engineers of the present day who do not hesitate to speak of 1½ and even 1 lb. of coal as sufficient to obtain an indicated H. P.; whether such statements will be borne out by any present or future improvements, time will prove. The reason we avoid what may be considered extreme views, is because we wish to stand on firm ground, and have all our statements supported by the general engineering experience of the country.

We propose, therefore, in the spirit of the introductory remarks, to allude simply to facts as they exist, and not to individuals, to attempt to separate the good from the bad, and to point out some of the legitimate improvements that can *always* be realized in the generation of steam, by faith in, and adherence to, the text with which we set out —that "*Heat is the Source of All Power in Steam.*"

Although the generation of steam or vapor of water has no necessary connexion with the machine in which the steam may be afterwards applied to produce motive power, yet it is generally the custom, in considering results, to mix the two together in such a way as to prevent the possibility of arriving at correct conclusions; the diameter of the cylinder is the dimension purchasers look to as the most important, whilst they receive, almost without comment, every variety and size of generator: the consequence of such a practice can be foreseen: the *amount of power* received for a given price varying to the extent of 30 and 40 per cent.

Elaborate and reliable experiments have been made to ascertain the quantity of heat necessary to evaporate a given weight of water, and we receive as ascertained facts the large amount of latent heat in steam, and the different quantities of fuel necessary to raise the temperature of a cubic foot of water from 32° to 212°, and to convert it from 212° into steam. We also take it for granted our readers are familiar with the expansive property of steam; if not, we cannot undertake to supply such elementary information.

In steam boilers we have two distinctive features —the fire-grate and the heating or absorbing surface—and they are so closely connected and mutually dependent upon each other, that if the relative proportion between them be altered, there is an immediate alteration in the results.

It happens that inexpensive boilers in construction are not necessarily economical in performance; on the contrary, if a small boiler is required to produce a large supply of steam, the result is a considerable waste of fuel; this remark applies to all description of boilers, for land or sea.

If all the heat developed in the combustion of 1 lb. of the best steam coal be utilized, it will evaporate from 14 lbs. to 15 lbs. of water at 212°. How near do we arrive at such a result in ordinary practice?—certainly not within 40 per cent. Ordinary land and marine boilers do not evaporate more than from 7 lbs. to 8⅓ lbs. of water at 212° per 1 lb. of fuel; in fact, it has been stated on good authority that the average duty of land boilers in the Lancashire districts does not exceed from 6 lbs. to 7 lbs. of water at 212° evaporated by 1 lb. of coal. There are instances of 10 lbs., 11 lbs., and 11½ lbs. of water at 212° being evaporated by 1 lb. of the best fuel; and if the late Newcastle experiments can be relied on, nearly 13 lbs. was evaporated; but this latter duty in an ordinary marine boiler, although with fresh water, is so far above what is realized in general practice, and so *very near* the theoretical value, that we cannot at present admit it in our calculations; it may, however, be conceded that fully 11 lbs. of water at 212° can be evaporated by 1 lb. of good steam coal—an improvement of more than 30 per cent. on the general practice of the present day.

In generating steam there are two chief sources of waste—radiation, and the heated gases allowed to escape through the chimney. The first can be partly removed by clothing the boiler with non-conducting material; the second is the most important and the most difficult to contend with.

In locomotives the temperature of the escaping gases is upwards of 1,000°; in land boilers, from 400° to 600°; and in marine boilers, from 500° to 900°; in each case depending to a great extent upon the relative proportion between the fire-grate and the absorbing surface, or, more correctly, between the amount of fuel consumed in a given time and the absorbing surface. And this brings us to the real practical difficulty of combining economy of fuel with the development of great evaporating power in a boiler of a given size and weight.

The amount of evaporation in a given time in steam boilers of the same type, is proportional to some extent to the difference between the temperatures of the escaping heated gases and the water to be evaporated with a given absorbing surface; the higher the temperature of the said gases the greater the evaporation in a given time, and the greater the amount of fuel required to evaporate a given quantity of water. On the other hand, the nearer the temperature of the escaping gases approximates to the temperature of the water to be evaporated, the less the evaporation in a given time, and the less the amount of fuel required to evaporate a given quantity of water.

In the above statements it is assumed in each case the boilers are of similar construction and worked under similar circumstances, the only difference being in the ratios of the absorbing surface to the amount of fuel consumed in any given time; the truth of the above is seen every day. In one case (we state of actual instances,) there is a marine boiler having 1,600 feet of absorbing surface, and 80 feet of fire-grate, or a ratio of 20 to 1, the combustion is at the rate of 24 lbs. per sq. foot of fire-grate per hour, the escaping gases have a temperature of upwards of 800°, 6¼ lbs. of water is raised from 100° to 260°, and evaporated by 1 lb. of fuel, and 190 cubic feet of water are evaporated per hour, or 1 cubic foot to 8½ sq. feet of absorbing surface.

In another instance, we have a marine boiler of similar construction and proportions, except in the ratio of fire-grate to absorbing surface, the latter being 1,200 sq. ft., and the former 40 sq. ft., or a ratio of 30 to 1. The combustion is at the rate of 16 lbs. per sq. ft. of fire-grate per hour; the escaping gases have a temperature of 450°; 8½ lbs. of water are raised from 100° to 270° and evaporated by 1 lb. of fuel, and 87 cubic feet of water are evaporated per hour, or 1 cubic ft. to 13¾ sq. ft. of heating surface.

These boilers are working under like circumstances, and, leaving out decimals, the figures given are substantially correct, and fully illustrate the connexion, previously stated to exist, between the temperature of the waste heat and the duty and economy realized.

If engineers had simply to generate steam with the least possible expenditure of fuel, regardless of time, and the cost, weight, and capacity of the generator, the problem could be solved with comparative ease, but the case is totally different; a certain weight of steam has to be produced in the least possible time with the least possible cost, weight, and capacity of the generator, and, above all, with the least possible expenditure of fuel—regard being had also to durability and facilities for repair. Here we have the most conflicting conditions, and it cannot be matter of surprise if mistakes have been, and are being made, it being only necessary that one element be over-valued or another be under-valued, to insure an unsatisfactory result. One manufacturing engineer swears by his fire grate, another by his heating surface, and another by his proportion or form of flues; it matters not which is the favorite view (one may be adopted with less injury to the purchaser than an other); nothing short of an impartial consideration of each and *all* of the requirements in generting steam can meet the difficulties of the case.

If such impartial consideration was the general

rule, there would be no occasion for the present remarks.

The history of the locomotive boiler clearly shows how little previous design there has had to do with its present efficiency; the necessity of using high pressure steam, and the difficulty of condensing, led the way to the blast; and it must be admitted that, of all kinds of boilers, the locomotive is the most scientific and the most economical, if allowance be made for the peculiar requirements connecting with its use.

Notwithstanding the temperature of the smoke-box is often 1,000°, with a combustion of from 60 to 120 lbs. of fuel per square foot of fire-grate per hour, a larger amount of water is evaporated by a given weight of fuel than in the majority of land or marine boilers. The rapid combustion is more perfect—almost every portion of the boiler is protected by non-conducting materials—less than 7 ft. of heating surface is sufficient to evaporate a cubic foot of water—and 1 lb. of Welch coal will evaporate 8½ to 9 lbs. of water; nevertheless, there is much unnecessary waste of fuel in the high temperature of the escaping gases (although they are not, *comparatively*, so high when the temperature in the furnace is considered), and in supplying the feed-water at a low temperature. With the introduction of coal as fuel, modifications may be required in the furnace and tubes; and there is much reason to believe, from comparative experiments, that *crowded* tubes do not allow the steam to escape to the steam space as quickly as it is generated.

We may confidently look to a considerable increase of economy and efficiency in the locomotive boiler, even though now for weight, space, cost, and economy of fuel, it must be placed at the top of the list, and certainly deserves the least criticism.

The duty and economy of steam boilers are mainly dependent on the rate of combustion, the ratio between the heating surface and the fire-grate, and the ratio between the heating surface and the consumption of fuel per hour, thus:

Rate of Combustion.

Cornish boilers burn per sq. ft. of fire-grate	4 lbs.
Ordinary land boilers	12 "
Marine boilers	18 "
Locomotive boilers	100 "

Ratio between Heating Surface and Fire-Grate.

Ordinary boilers	12 to 1.
Marine boilers	27 to 1.
Cornish boilers	36 to 1.
Locomotive boilers	75 to 1.

Ratio of Heating Surface to Rate of Combustion.

Cornish boilers	9.0 to 1.
Marine boilers	1.5 to 1.
Ordinary land boilers	1.0 to 1.
Locomotive boilers	0.75 to 1.

The preceding figures are only approximate, but they represent the particular features of each class, and if we were to tabulate them according to the *economy* generally realized, the Cornish boiler would stand first, the marine second, and the common boiler third; for obvious reasons, the locomotive boiler cannot be fairly classed with the other three.

If we take as a standard the *rate of evaporation* for a given quantity of heating surface, we must place the common land boiler first, the marine boiler second, and the Cornish boiler third; and here again the locomotive boiler must be omitted as an exceptional construction.

In such general remarks and statements as the preceding, it is not necessary that they should represent the experience of all our readers—they are based on actual practice, and suffice to illustrate the subject under discussion, and point out the connexion always existing between sound principles and successful practical engineering.

It is assumed, as generally acknowledged, that from 30 to 60 per cent. of fuel is wasted in generating steam, and that a considerable amount of this waste ought to be, and can be avoided; and although we do not dictate the exact means for accomplishing this, we can easily trace out, in the majority of cases, the direction of the improvement required.

Boilers made and used in districts where fuel is cheaply obtained have never been remarkable for their economical performances, nor are the engineers in those districts famed for great anxiety to introduce improvements for economizing fuel; it cannot be expected, and we are not surprised to know that land boilers in coal districts only evaporate 6 lbs. of water at 212° by 1 lb. of fuel.

With wagon or plain cylindrical boilers, that form such a large perportion of those now in use on land, economy of fuel is simply a question of size to produce a given weight of steam, it becomes almost entirely a question of capital; an increased ratio between the heating surface and the fire-grate is in this case the desideratum; the furnace flues and chimney being well proportioned, and every effort made to check radiation.

In the Cornish boiler, where the furnace is *within* the inside tube or tubes, that temperature in combustion which is so essential to its perfection is not easily obtained; hence the difficulty that arises in attempts to consume the smoke in such furnaces; and increase of duty and economy would ensue from placing the furnace *under* the boiler, and returning the heated gases through two smaller tubes—a plan that has been often tried with universal success; it allows ample space in the furnace, insures perfect combustion, and has also other mechanical advantages.

In other descriptions of land boilers, where additional heating surface is introduced within the main shell, if well proportioned, they are generally more economical than the Cornish boilers with the same ratio of heating surface to fire-grate, and with the same rate of combustion.

There can be no doubt that, for land purposes, a boiler with internal flues, capacious furnace, a greatly increased ratio between the heating surface and the fire-grate, and a rate of combustion above that in general practice, is the cheapest, the most effective, and the most economical.

There can be—and indeed there is—no difficulty with such boilers in realizing an increased economy to the extent of 30 per cent., and in obtaining a greater effect in a given time from a ton weight of boiler.

In addition to the purely economical value of steam boilers, we shall hereafter have to consider their mechanical construction, especially as affected by the introduction of steam of high pressure.

In concluding these remarks, we would impress on our readers that our only wish is to direct attention generally to present defects in the Steam Engineering of 1859, and to point out to young engineers those paths of improvement where their energies and talents will be productive of real benefit to their profession, and the world at large.

In our last number we referred briefly to the present efficiency of boilers used on land, and pointed out the wide margin still left for improvement; and as it is neither the intention nor object of these general observations to enter minutely into constructive details, we propose now, as briefly, to say a few words respecting the present efficiency of marine boilers.

When steam was first applied to the propulsion of ships, it was generated in large boilers with capacious internal flues, the pressure per sq. in. seldom exceeding 4 or 5 lbs. The advantages of this class of boilers are the ready access to all portions of the internal surface for cleaning, and their consequent durability, extending frequently to 8 and 10 years; their disadvantages are their weight, both of iron and water, and the great space they occupy in the ship. They have been, and still are, much used for tug-boats, and a few may be found in some of our largest first-class steamships.

To remedy the great weight and bulk of the flued boiler, the multitubular system was introduced, and it has now almost completely supplanted all other kinds of boilers for steamships, and although the particular arrangement of the present marine boiler may not be the best, it has nevertheless stood the test of a lengthened trial, and to a certain extent can be fully relied on.

To those practically acquainted with the construction of the boilers now in use in our naval and merchant steam fleets, we shall be understood in describing them as those in which we have first the furnace, then the flame-box as a continuation thereof, then the tubes or flues returning over the furnace to the smoke-box; and, lastly, the uptake leading from the smoke-box to the chimney, and all, excepting the chimney, enclosed in the outer shell. This is the kind of boiler now generally adopted on board ship; in some cases, as in the *Great Eastern*, there are furnaces at each end of the boiler, leading into one flame-box, and having two sets of return tubes, leading to one or two chimneys as may be preferred. This arrangement, well proportioned, can be made the most effective of any, the only drawback being the necessity of having two stoke-holes—a matter of some importance in a small ship.

Adhering to the rule we have hitherto observed to avoid discussing exceptional cases, we will only allude in passing to the existence of two other kinds of boiler sometimes placed on board ship. In the one, we have, instead of return tubes, a series of vertical chambers, strongly stayed, and formed of ¼ in. iron. This arrangement has some advantages, one of which is stated to be that of durability. In the other design, introduced into several American mail steamships, the flame passes from the flame-box among a number of vertical tubes to the uptake, the steam being generated from the water in these tubes. We simply mention these exceptional arrangements, because they deserve to be noticed as having been proved by actual experience to be sound and practical.

We now return to the ordinary multitubular marine boiler as previously described, and generating steam generally at a pressure of from 15 to 25 lbs. pr. sq. in.; 30 lbs. per sq. in. appears to be the limit to which flat surfaces can be safely stayed, without crowding the stays so as to prevent easy access for cleaning and repair, and as also a rectangular form of shell wastes less space in the ship than a cylindrical, the former is almost universally adopted, and will, doubtless, be retained until the use of steam of higher pressure necessitates a different construction better calculated to resist the increased pressure.

The few accidents from explosion that have occurred in British steamships seem to show that as a general rule marine boilers have been constructed of sufficient strength for the pressure used, although this is no proof that the material has been well applied; indeed it is a matter of congratulation that we are not at present called upon to criticise the constructive details of a very large portion of our present marine boilers. We must, however deprecate the common practice of attaching long stays intended to resist a strain of 3 tons to one side only of a single angle iron by a badly fitting bolt of 1¼ in. or 1½ in. diameter; as also the system adopted in many large works of plating boilers without reference to the position of the stays, as though they could be shifted anywhere to suit the seams.

In no branch of mechanical engineering has such a want of science and constructive ability been displayed as in the designing and construction of marine boilers; and at the present time the bulk of our locomotive boilers have the longitudinal joints of the barrels only singly riveted, although it is known that an additional row of rivets would increase the cost but slightly, add some 14 per cent. to the strength of the barrel, and enable the weight to be reduced. It is very questionable if a late explosion and consequent loss of life would have occurred if the system of double riveting had been adopted.

The very best engineering should be displayed in the mechanical design and construction of boilers; and if an ignorant class of men are employed as foremen, the drawings supplied to them should be of the most complete and precise description.

In investigating the working efficiency of the present multitubular marine boilers, we are met at starting by a difficulty not experienced in land boilers—we allude to the use of salt water, which not only causes a considerable waste of fuel, but renders it almost impossible to ascertain with any

degree of accuracy the evaporating power of a boiler; and this element of uncertainty as to the duty realized has exercised a most baneful influence on the improvement of marine boilers in the mass.

Our standard works, too, on the steam engine have greatly underrated the loss of fuel occasioned by the use of salt water, and constantly discharging into the sea a portion of the heat created by combustion in the furnace. It has been assumed that the loss of fuel referred to may be estimated by calculating the heat required to raise the extra feed supplied (to be afterwards blown into the sea), from its entering temperature to that at which it is discharged from the boiler; but observation and experience prove that both water and *steam* are discharged; and hence there is not merely the loss of sensible heat, as before estimated, but also a considerable loss of that latent heat in the steam, previously generated at a considerable expense of fuel. If this is not so, how is the fact accounted for, that in America, as the result of considerable experience in both fresh and salt water boilers, it is found absolutely necessary to allow at least one-fourth more boiler power when salt water is used than when fresh, whilst many engineers allow even a difference of one-third?

We have then in ordinary practice, instead of a loss of some 10 or 12 per cent., as generally stated, a loss of at least 20 per cent.; and we have known instances where the loss of evaporative power, by changing from fresh to salt water, has amounted to 30 per cent.

If we are moderate, and take one-fifth as the actual loss, this alone is a serious drawback, when economy of fuel is of so much importance on board ship. There is without doubt considerable difference in the amount of loss by blowing out, according as the engineer in charge is more or less intelligent; for whilst on the one hand too much regard to economy may ruin the boiler, on the other, too much regard to avoidance of incrustation will result in needless waste of fuel.

We repeat, that in consequence of the inconvenience attending any attempts to ascertain the actual evaporation or economical efficiency of marine boilers, the most extreme views and practice have obtained, and almost without comment or criticism; no one knows with certainty the actual result of any particular arrangement or proportion, and consequently, no one has the means of giving a standard for comparison.

Among several thousand boilers now in use, we find the greatest variety of constructive proportions, and as a natural result there exists a difference of 30, 40 and 56 per cent. in the evaporative power of boilers having equal heating surface and fire-grate.

The amount of heating surface and fire-grate allowed for a given nominal power, varies 25 and 100 per cent. respectively, whilst the ratio between these two main elements varies fully 70 per cent. We are literally "at sea" in marine boiler engineering, nor do we seem to acknowledge practically that, except under special circumstances, there must be certain arrangements and proportions that will give the best result.

The first desideratum in all boilers is to obtain as perfect combustion of the fuel as possible, and experience has fully proved that, unless special arrangements are made for a supply of oxygen to the fuel, in addition to what is passed through the fire-grate, by a natural draft, and unless ample space is allowed in the furnace and flame-box for the products of combustion to combine, and maintain a high central temperature, the total heat resulting from combustion will be far short of what can be realized.

Now these are not opinions, they are proved facts—obvious to every unprejudiced practical engineer; and it is, therefore, difficult to explain why so many boilers are designed with proportions entirely at variance with these ascertained facts.

Seldom are efficient arrangements made for the required supply of air, and the furnaces are so contracted in height that the fuel almost touches the upper plates; and then, as the half-consumed products of combustion struggle along this comparatively cold-walled chamber, they pass into a flame-box (often only 16 in.) as contracted as the furnace; and when they traverse the small tubes the wasteful operation is completed, and results in a deposit of soot, and a most defective evaporation. This state of things exists in the bulk of our present marine boilers, and is discreditable to the reputation of British engineers.

An impartial consideration of comparative results in burning fuel in a boiler furnace appears to indicate that there should be a minimum height of 2 ft. between the fire-bars and furnace-crown, at the dead-plate, and a minimum length of 2 ft. to 2 ft. 6 in. in the flame-box.

Without presuming to pass judgment on the comparative merits of the various schemes for furnishing an extra supply of air to the furnace, for the purpose of effecting a more perfect combustion, and the consumption of smoke, we cannot but feel it is due to Mr. C. W. Williams to express the opinion, that his simple arrangements deserve the best consideration and confidence of practical engineers.

The vexed question of what description of coal is best for marine boilers is yet undecided, although of late years careful experiments have, to a certain extent, disproved the results arrived at by the Admiralty, and given in their three reports; and we may add, that the public estimation of the value of the best North Country coal, for steam purposes, is greatly increased; and enough has been done to convince the unbiassed that, with certain arrangements of furnace, external smoke can be almost entirely avoided.

In supplying furnaces with fuel, it is to be regretted that the practice is so common of throwing the fresh charge of fuel to the back of the furnace, instead of keeping the fresh fuel supplied to the front near the dead-plate, and, as combustion increases, pushing it towards the bridge. This latter system of firing, as well as others of a similar character, entails rather more work on the stoker, and hence is seldom adopted.

The arrangements generally introduced for the supply of air to the stoke-hole are of the most imperfect description, the cold air descending being met and obstructed by the hot air ascending, and this arrangement is adopted with the knowledge that the evaporative power of marine boilers is often seriously affected by a deficient supply of air to the stoke-hole.

If fault can be found with the present arrangements and proportions of furnace and flame-box, what shall be said of the varied dimensions of the return tubes? On the Thames we have 2½, 2¾, and 3 in. tubes from 5 to 6½ ft. long; on the Clyde we have from 3 to 4 in. tubes from 6 ft. to 8 ft. in length, and to estimate rightly the importance of these tubes, it must be remembered that they constitute about three-fourths of the total heating surface. Many a marine boiler has been spoilt by the introduction of badly proportioned tubes. Then there is the question of what actual evaporative value a long tube has; from the results of some careful experiments it has been ascertained that about one-fifth of the length of the tube next the flame-box was equal in evaporative value to the flame-box itself, but that the remaining four-fifths were not together, equal in evaporative value to the one-fifth next the flame-box, and that the one-fifth next to the smoke-box was of very little use for generating steam.

Now, if these experiments are trustworthy, and we believe they are, they must modify considerably the prevailing opinions on the evaporative value of tube surface; and it must be conceded that practical experience with long small tubes has generally corroborated the conclusions to be drawn from them.

The practical difficulty that arises by the adoption of short tubes, is the necessity of increasing the number to obtain that heating surface which the ship-owner expects to receive from the manufacturing engineer, and which he is not inclined to lessen, although with the improved arrangement it may be more effective.

In considering the question of diameter and length of tubes, there are two points to be noticed: first, the sectional area through the tubes being sufficient to receive and convey the expanded gases from the furnace without retarding the same; and, secondly, reducing the length of tube to a minimum consistent with the heating surface required, and the number of tubes that can be conveniently introduced.

It is not our wish to lay down the law on a subject so full of difficulty, but we can safely indicate in what direction we have erred, and what course should be pursued to remedy those errors.

An imperfect and sluggish combustion is the inevitable result of contraction in the sectional area through the tubes, and a waste of fuel is as inevitable where there is a deficiency of heating surface for a given rate and amount of combustion.

Numerous cases occur in practice in which both the above errors are existing, and are simply the result of defective information in the designer.

It is not unusual to find a difference of 25 per cent. in the areas of the chimneys of boilers of the same size and proportions; considering that the heated products of combustion gradually cool and contract as they leave the tubes, and that the frictional surface is reduced from about 13 to 1, there can be no doubt that the sectional area of the funnel should be considerably less than that through the tubes; we find, however, frequent instances, where the chimney is as large, and even larger in sectional area than the tubes.

Then who decides on the height of the chimney? why, frequently even in large establishments the draughtsman who prepares the rigging plans, so as to make it look well with his spars, &c.; thus often a boiler that requires an unusually high chimney has a low one.

We have on a previous occasion referred to the connexion always existing between the generating power of a boiler and the difference of temperatures between the escaping gases and the water to be raised into steam; a strong draft and rapid combustion making an effective but not economical boiler.

With a chimney of a given height—the draft being dependent upon the temperate of the escaping gases—when there is a large proportion of heating surface, a sharp natural draft and rapid combustion are not attainable.

As long as the rate of combustion is dependent upon heat escaping up the chimney, so long must the loss of that heat be submitted to; and if an artificial blast is substituted, and an attempt is made to absorb all the heat created by the combustion in the furnace, we shall still have this practical difficulty, that when the difference between the temperatures of the flues and water becomes, as it would in this case, very small, either a great increase of time must be given to complete the evaporation, or the ratio between the heating surface and the rate of combustion must be greatly increased.

The advantage to be derived from an artificial blast is the power to increase the rate of combustion *ad libitum*, and thus make a small boiler do the same duty as a large one; and, as a question of weight of boiler, such an arrangement is of great importance.

What are the practical deductions to be made from the preceding remarks?

We think there is sufficient evidence, of a thoroughly practical kind, to prove that attention to those arrangements and proportions we have shadowed forth, will result in a considerably increased duty and economy.

With capacious furnaces and flame-box, an ample supply of air both in the stoke-hole and fuel, tubes *not exceeding* 5 ft. in length, and not less than 3 in. external diameter, a ratio of heating surface to fire-grate of not less than 40 to 1, and a rate of combustion from 16 to 22 lbs. of good steam coal per sq. ft. of fire-grate, with such proportions, 11 lbs. of water can be evaporated under atmospheric pressure by 1 lb. of coal.

When we compare such a result with the average duty realized at the present time, we feel we are justified in deprecating the present inefficient state of our marine boiler engineering, with its de-

ficient supply of air, contracted furnaces and flame-box, badly proportioned tubes and chimney, and an evaporative duty of only some 7 to 8 lbs. of water by 1 lb. of coal.

Unless surface condensation is introduced there appears little prospect of any extensive introduction of high-pressure steam into steamships, and we must be content for some time yet with a maximum pressure of 30 lbs. per sq. in.

If surface condensation ever becomes general, we may be quite certain there will be a considerable increase of the working pressure; but to design a boiler adapted for a steamship and capable of resisting a working pressure of 100 lbs. per sq. in., requires great care and experience: either the cylindrical form must be adopted, or flat surfaces must be stayed, like the fire-box of a locomotive boiler; in either case, it is impossible to allow of internal cleaning, so that any failure of the fresh water supply would be fatal to durability.

Although the block-ships and gun-boats fitted with high-pressure machinery, and working with salt water, are so seldom under steam, great inconvenience has resulted from the inability to keep the boilers free from incrustation.

If steam could be generated in small pipes, and their durability ensured, it would be a perfect high-pressure boiler, as 200 lbs. per sq. in. could be generated with as much safety as 20 lbs. in our present marine boilers.

We do not think there is any more hopeful branch of engineering than that connected with the propulsion of ships, nor any more likely to repay the improver. Necessity will ultimately oblige both steamship owners and engineers to economize fuel, and a truly satisfactory result can only be arrived at by the most laborious and persevering attention to the minutest details.

Connected with boiler engineering, the profession is much indebted to Mr. Fairbairn for data of a most valuable character; and there are many engineers of the present day who are helping to introduce great improvements. Our English exclusiveness militates greatly against a free interchange of practical experience among our leading engineers, and the young engineer must trust entirely to his own struggles for a position.

In the preceding remarks many points of interest in steam generation have been omitted, but with the excepting ordinary details, they will be referred to in the introductory observations on the Applications of Steam as a Motive Power.

(To be continued.)

Hempfield Railroad.

The earnings of this roads for the year ending Aug. 31, 1859, have been:—From passengers, $13,662; freight, $16,784; mails, etc., $3,336; total, 32,411. The current expenses, $25,144.

Completion of the Grand Trunk Railroad.

The Chicago *Press* of the 21st says:

The West is already beginning the feel the effects of the opening of the Grand Trunk Railway. That company are now shipping direct to Liverpool, beef, pork and lard, for 87½c. per hundred. This amounts to $2 80 per barrel. Three years ago the lowest winter freight between Chicago and New York, if we mistake not, was $1 per hundred; now it is one-eighth less to Liverpool. We learn that the New York and Erie Railroad has telegraphed to its agency here to take European freights for the same price as the Grand Trunk, and doubtless the New York Central will at once follow the example, if it has not already done so. The rates are of course for all rail to Portland, a distance of more than eleven hundred miles. As soon as navigation opens, a line of propellers will run in connection with the Grand Trunk to Sarnia, and the European steamers will run up to Montreal, leaving only some five hundred miles of freight by railway. If the line can now afford to carry at present rates, it is likely, with six hundred miles less railway, the business public will welcome a still further reduction before the 1st of May.

Pennsylvania Coal Trade for 1859.

The Pottsville *Miners' Journal* of the 14th inst. publishes its annual review of the coal trade of the United States, for 1859. The following table will show the amount sent to market from the several regions:

Schuylkill Region.	1858. Tons.	1859. Tons.	Incr'se. Tons.
By Reading R. R.	1,542,669	1,632,933	.....
Trevorton coal	.....	23,679	.....
		1,609,253	66,584
By canal	1,323,804	1,372,021	48,217
From Pinegrove	76,902	67,341	*9,621
Total	2,943,435	3,048,615	114,801
			9,621
Increase in 1859			105,180
Lehigh Region.			
By canal	909,000	1,050,659	141,659
By railroad	471,030	577,652	106,622
Shamokin Region	135,893	180,753	44,800
Wyoming "			
Canal, South	307,174	401,634	94,460
Canal, North	39,256	51,914	12,658
Penn. Coal Co.	630,056	688,854	58,798
Scranton, North	145,164	197,353	52,191
Scranton, South	538,246	632,080	193,823
Del. & Hudson Co.	348,789	591,000	342,211
Lack. & Bl'ms. R. R.	40,253	80,000	39,747
Col. Coal & Iron Co.	16,541	17,000	459
	6,524,838	7,517,516	992,678
		6,524,838	
Increase			992,678
Semi-Anthracite.			
Trevorton	106,686	124,290	17,604
Lykens Vall. Co.	72,398	67,564	*4,835
St. Mt. Company	55,447	71,148	15,701
Broad Top	105,478	130,595	25,117
	340,009	393,597	58,422
			4,834
			53,588
Bituminous.			
Cumberland coal	646,656	697,466	47,810
Imported	259,885	281,208	21,323
	1,249,550	1,372,271	122,721
		1,249,550	
		122,721	
Add Anthracite			952,678
Increase of all kinds			1,115,399

From this table it appears that the whole quantity sent to market amounted

In 1859 to	8,889,787 tons
In 1858 to	7,774,388 "
Total increase in 1859	1,115,399 "
Of which anthracite	992,678
Other kinds	122,721
	1,115,399 "

The increase from the anthracite regions was furnished as follows:

From the Schuylkill region	105,180 tons
Lehigh region	177,182 "
Shamokin	44,860 "
Wyoming basin	665,456 "
Total increase in 1859	992,678 "

Of the amount sent to market in 1859 there were

Anthracite	7,515,516 tons
Other kinds	1,372,271 "

Of the whole supply of anthracite:

Schuylkill county furnished	3,048,615 tons
The other regions	4,468,901 "
Total	7,517,516 "

The Anthracite Coal Fields.

The first or southern coal district, embracing the Schuylkill, Pinegrove, and Lyken's Valley regions, contains	75,950 acres
The second or middle coal field, comprising the Lehigh, Shamokin and Trevorton regions, contain	85,525 acres
The third, or northern coal field, comprising the Wyoming basin, contains	76,805 acres
Total	238,280 acres

From these regions there were sent to market, in 1859, the following quantities of coal:

	1859.	1858.	Incr. 1859.
First district	3,245,248	3,131,687	113,561
Second "	1,861,955	1,552,965	308,990
Third district	2,791,236	2,135,224	596,012
	7,838,439	6,819,376	1,018,563
	6,819,876		

Inc. in these dist. 1,018,563 tons.

Boston and Providence Railroad.

Statement of the operations of the Boston and Providence Railroad for the year ending November 30, 1859.

Receipts.

From passengers	$310,435
" freight	303,807
" mails	7,890
" miscellaneous sources	33,041
Total	$654,673

Expenditures.

Wood, 3,310 cords, av. per cord, $5.41.		$17,909 32
Coal, 3,333 tons gro. av. per ton, $5.90.		19,684 84
Wood, 419 cords kindling coal		2,304 98
Water, for engines, etc.		1,515 00
New sleepers	$6,788 69	
Am't cred. to fund for ren'l	1,211 31	
		8,000 00
New iron used	$18,255 20	
Am't cred. to f'd for ren'l	3,744 80	
		22,000 00
Repairs railroad	$31,623 67	
Am't cred. to f'd for rep'rs	4,376 33	
		36,000 00
Repairs on locomotives	$16,916 98	
Am't cred. to f'd for ren'l	5,083 02	
		22,000 00
Rep'rs on pass. & bagg.cars.	$7,398 06	
Am't cred. to f'd for ren'l.	5,101 94	
		12,500 00
Repairs of freight cars	$5,118 57	
Am't cred. to f'd for ren'l.	7,281 43	
		12,400 00
Repairs on stations, building and fixtures	$12,995 41	
Am't paid for building new freight house, and on account passenger rooms, etc.	10,056 90	
		23,052 31
Repairs on bridges	$5,680 51	
Am't p'd for new draw br..	5,100 00	
		10,780 51
Repairs of fences	$2,223 35	
Am't cred. to f'd for ren'l.	776 65	
		3,000 00
Gratuities and damages for loss by accidents, etc.		3,000 00
Removing ice and snow	$359 49	
Am't p'd for two new sn'w pl.	1,750 00	
		2,109 49
Passenger expenses		34,391 38
Freight do.		47,189 40
Miscellaneous do.		14,014 15
Switch and gatemen		10,462 97
Taxes and insurance		8,405 82
Waste for cleaning engines and cars		1,411 50
Oil do. do. do.		4,275 74
Labor in transportation of mails		617 50
Total		$317,024 92

General Statement from Company's Ledger.

	Dr.
New track, India street	$13,190 28
Graduation and masonry	775,000 00
Wooden bridges	101,000 00
Iron do.	9,840 00
Stations, buildings and fixtures	497,000 00
Land, and land damages	477,939 52
Engineering	95,000 00
Seekonk Branch and wharf	31,655 70
Providence and Worcester R. R., on joint account	399,904 90
Boston and Providence R. R., in R. I. stock	150,000 00
Iron account, as follows:	
7,550 tons laid down, at 42 per ton	317,100 00
613,200 lbs. chairs, at 2 cents per lb	12,264 00
114 tons spikes, at $50 per ton	5,700 00
Sleeper account:	
132,880 sleepers, at 33 cents, laid in track	43,850 40
Fences:	
34,560 rods, at 67 cents	23,155 20
Locomotives account:	
22 locomotives, average, $4,786 36	105,300 00
Passenger and baggage cars:	
9 76-seat cars	11,880 00
18½ 60 do.	22,740 00
10 8-wheel baggage cars	7,680 00
All other cars	1,800 00
Freight cars:	
93 8-wheel box cars	33,820 00
13 4- " " "	1,300 00
48 8- " platform cars	12,990 00
22 8- " coal "	7,550 00
4 4- " " "	340 00
20 4- " gravel "	2,090 00
Cash assets	339,857 11
Property, to represent surplus, etc.:	
300 shares Boston & Prov. R.R. stock	30,000 00
400 shares Stoughton Br. do.	40,000 00
Real estate, not needed for the purposes of the road	60,135 90
Materials on hand, viz: fuel and iron	33,145 40
Total	$3,663,138 41

	Cr.
Capital stock, 31,600 shares at $100	$3,160,000 00
Bonds payable, 1860-'8. $174,220 00	
Dividend due Jan'y 2d, $128,569 50	128,569 50
Cash balances due	21,599 32
Total as cash liabilities	324,388 82
Funds for renewal, as follows:	
For iron { $7,000 00 / 3,744 80 }	10,744 80
For repairs railroad	4,376 33
Do. locomotives	5,083 02
Do. passenger cars	5,101 94
Do. freight cars	7,281 43
Do. fences	776 65
For sleepers { $4,657 69 / 1,211 31 }	5,869 00
For gratuities and damages	2,016 23
Income account—old balance	31,606 50
Do. surplus, 1859	105,893 69
Total	$3,663,138 41

We copy the following from the report of the Directors:

In making up the account of expenditures, it will be seen that we have adopted a course which, if adhered to, will secure a good degree of uniformity in the charged expenses of operating the road.

In the first place, we assume that there is an annual decay of sleepers, bridges, station houses, etc., and that the extent of that decay for each year, is properly chargeable to the expenses of that year.

In the second place, a fortunate concurrence may, in some years, reduce the actual expenditures below the average of annual expenses; and, in other years, various causes may conspire to carry the expenditures above that average; and thus a fluctuation in that account is presented, which prevents any safe calculation for the future on the part of those interested in the property; and which, therefore, it is desirable to avoid.

We have endeavored to ascertain, so far as is practicable, from the experience of years, what may be expected, with a given amount of business, to be the amount of expenses chargeable to each account, annually; and if in any year the amount actually expended falls short of that estimate, we do not rely upon a permanent reduction of those expenses, but charge the expenses of the year with the estimated amount, and carry the difference to a fund to meet what may be the expenditures of another year on that account beyond the estimate.

For instance, we assume that, in a series of years, the cost of renewing sleepers will be $8,000 annually. The last year it amounted to only $6,788 69. The expenses on that account are charged at $8,000; and the difference, $1,211 31, is carried to the fund for the "renewal of sleepers." In this manner, the business of each year is charged with its proportion of the decay and depreciation of the property; and, as far as is possible, uniformity secured in the expense account. Upon this principle $29,591 71 have been carried to the several funds for renewal, during the past year; and the whole amount of those funds is now $41,249 40,—the details of which will appear in the balance sheet.

During the year, a new valuation of our whole property has been made, and the construction account reduced to $3;160,000—the amount of our capital. It is intended that that valuation shall represent the actual present cash value of the property.

Our funded debt payable from 1860 to 1868,—amounts to $174,220; but it will be observed, that, in the balance sheet, that debt is treated as if now due, and that the balance there shown is the balance after the payment of all debts of the corporation; so that the stockholders may be congratulated upon the fact that the corporation is entirely free from debt, beyond its means of immediate payment, and that the future earnings of the road will be subject to no charge on that account. Every doubtful claim of the corporation has been charged to "profit and loss," and the assets, as they appear in the balance sheet, are put down at or below their cash value.

The Report is a brief, but it must be a satisfactory one to the stockholders, and we copy it nearly in full for the purpose of showing the system upon which the expenditures are made up. Had it been more extensively followed, we should not have seen so many instances of 10 and 20 per cent. dividends, for two or three years, and none thereafter. We should like to see all accounts of current expenditures made up in the same manner.

Dividends paid during the year, 8 per cent.

Banks of the United States.

One of the most comprehensive volumes published for the year is the "Merchants' and Bankers' Register for 1860," published at the Bankers' Magazine office, New York, and containing as follows: 1. A List of the Banks, arranged alphabetically, in every State and City of the Union, December, 1859; Names of President and Cashier, Location and Capital of each. 2. A List of Private Bankers' in Three Hundred and Fifty Cities and Towns of the United States, December, 1859. 3. A List of the Banks in Canada, their Cashiers, Managers and Foreign Agents. 4. Directors and Officers of the Bank of England, 1859; List of Members of the New York Stock Board, and Stock Sales of 1859. 5. Banks in the City of New York; Names of President, Vice President, Cashier, Assistant Cashier and Notary Public of each. 6. List of Banks and Bankers in London, November, 1859. 7. List of Bankers in Europe, Asia, South America, Australia, West Indies, &c. 8. Attachment Laws and Statute of Limitations, in each State of the United States, &c., &c. Price $1.25.

Fitchburg and Worcester Railroad.

The earnings of this road for the year ending Nov. 30, 1859, were as follows:

From passengers	$14,934
" freight	21,473
" mails	500
" miscellaneous sources	10,811
	$48,768

The disbursements for the year were:

For current expenses	$32,140
Paid interest	3,832
" dividends	10,573
Balance	2,218
	$48,763
Capital stock paid in	$198,800
Funded debt	62,900
Floating debt	300
	$262,000

The company have assets to the amount of $17,525, which would reduce the cost of the road to $244,474.

Journal of Railroad Law.

EVIDENCE. ADMISSIBILITY OF, IN AN ACTION FOR DAMAGES.

It is often a difficult question to decide what evidence is admissible and what is inadmissible. Rules of evidence are laid down for the purpose of more certainly arriving at the truth, and when properly applied they greatly assist the administration of justice. The case of Robinson against the Fitchburg and Worcester Railroad Company recently decided in the Supreme Court of Massachusetts throws some light upon the question of admissibility of evidence in an action against a railroad corporation to recover damages for injuries sustained. In this case the plaintiff was injured by a locomotive engine of the defendants while he was delivering wood from a team by the side of their railroad track.

At the trial the plaintiff, in order to show want of care on the part of the defendants, in not ringing their bell, or giving some signal of the approach of the train to the place where the plaintiff was engaged in delivering wood, at the time of the injury, introduced evidence tending to show that there was a farm crossing, or traveled place at that point; and, as tending to prove that fact, offered evidence that there had been such a crossing there *previously* to the construction of the railroad. This evidence was excluded by the court.

The plaintiff then offered to show, that there was a crossing there *at the time of the trial*, as tending to show its existence at the *time of the injury*. But this evidence was all excluded. The plaintiff called the conductor of the train by which he was injured, and, in order to show that the engineer of the train was not a careful, skilful and proper person to run the train, asked the conductor, (who, it appeared, had known the engineer for several months,) whether he knew of any specific instances of want of care in the engineer in his business of running trains, within three months of the injury, before or after. But the court excluded the question.

The plaintiff, in order to show that he was in the use of ordinary care at the time of the accident, asked a witness, whether the only mode of approach by a team to the place of delivering the wood was by way of the track. This was objected to and excluded, on the ground that it was a

question for the jury to decide, upon the whole evidence relating to the locality.

Evidence of certain statements concerning the accident, made by the engineer of the train to the plaintiff within ten days after it, was offered by the plaintiff, but excluded by the court.

Evidence that the president of the corporation had stated to the plaintiff that he thought the defendants would give him something, or pay him something, was offered, as tending to show a recognition of their liability by the defendants: but it was excluded.

The plaintiff having contended that the defendant employed the engineer of the train at low wages because of his want of skill, the defendants were allowed, against the objection of the plaintiff, to ask the president of the corporation this question, "How did you employ him as engineer; as what kind of engineer?" and the answer was, "I employed him as a competent engineer, with skill enough to make him a safe man to run an engine.

It appeared that some months after the accident a letter was addressed by the plaintiff to the defendants, which was read to the stockholders at their annual meeting by the president, and was by him produced, on notice, at the trial. But it was proved, without objection, that upon the reading of the letter at the meeting, a vote was passed to lay it on the table; and the court ruled the letter incompetent.

The plaintiff offered to show, as part of his damages, that the injury rendered him unable to do the labor required by his business, and so broke up his business. But the court excluded the evidence.

The plaintiff requested the court to instruct the jury that if they were satisfied that the plaintiff, while lawfully on the track of the railroad and in the exercise of ordinary care, was struck and injured by the defendants' cars or engine, the burden of proof would then shift upon the defendants to show that they were using ordinary care at the time. But the court refused so to rule, and instructed the jury that the burden of proof was upon the plaintiff to show affirmatively, that while he was lawfully on the track and in the use of ordinary care he was injured by the defendants, and that they were not in the use of ordinary care.

The jury returned a verdict for the defendants. But upon exceptions to the rulings of the judge and to the charge, the plaintiff appealed to the Supreme Court. The opinion of the Supreme Court is as follows:

BIGELOW, J.—Upon consideration of the several exceptions insisted on by the plaintiff at the bar of this court, we see no sufficient ground for disturbing the verdict rendered in favor of the defendants in the court below.

I. Evidence of the existence of a private crossing at the place of the accident, prior to the construction of the railroad, and also subsequently to the time of the injury to the plaintiff, seems to have been excluded on the ground of its irrelevancy. The precise question at issue was the state and condition of the place at the time when the collision took place, and whether there was then a crossing in use over the track of the railroad, which would require a greater degree of caution in the exercise of due care by the servants of the defendants, than at other places on their road, where no crossing existed. This the plaintiff was allowed very fully to show. Now, without deciding that proof of a certain state of facts or condition of things, prior and subsequently to a particular occurrence, would not be admissible and competent as leading to a just inference of their existence at the time when the occurrence took place, it seems to us that, in the present case, there is nothing in the bill of exceptions, which shows that the evidence excluded was so material and relevant to the subject matter which the plaintiff sought to establish, as to render its rejection a valid ground of exception. Many questions relating to the materiality and relevancy of proof to the issue on trial, necessarily address themselves, very much to the sound discretion of the presiding judge. He only can best determine whether evidence is collateral or unimportant, having before him all the facts in proof. A court of error will not therefore revise his decision upon such questions, except in cases where manifest mistake is shown.

II. Evidence of specific acts of negligence and carelessness on the part of the engineer, in running the train on other occasions than the one in question, was clearly incompetent. It would not only lead to collateral inquiries, and so distract and mislead the jury from the true issues before them, but it had no legal or logical tendency to prove the point in issue. Because a man was careless or negligent of his duty in one or two specified instances, it does not follow that he was so at another time and under different circumstances. * * * * * * *

III. The inquiry of the witness as to the mode of approach to the wood pile, sought for his opinion on a matter which bore directly on the question of the use of due care by the plaintiff at the place of the accident. It was, therefore, incompetent. All the facts bearing on the locality, and the means of access to it, being laid before the jury, it was their province to decide whether there was any other mode of approach which a person of ordinary prudence could take. In determining this question they could not properly be aided by the opinions of witnesses.

IV. The admissions and statements of the engineer, after the accident, were inadmissible. The defendants were not in any way bound by his confessions. They were not within the scope of the engineer's agency for the defendants, and were made some days after the accident. They were, therefore, only the declarations of a third person and incompetent as being merely hearsay evidence.

The evidence of the president of the corporation, who employed the engineer, that he was hired by him as skilful and competent, was relevant and material, in answer to the ground assumed by the plaintiff as a foundation for his right of recovery, which was that the engineer was employed by the corporation with a knowledge that he was unskilful, and at low wages. As distinct and substantive proof in defence of the case, we think it would have been liable to objection, but it is quite clear that it was competent in answer to the case alleged and attempted to be proved by the plaintiffs.

The remaining objections to the rulings of the court as to the offer and rejection of the evidence are either clearly immaterial, or wholly untenable, as falling within the scope of the proper discretion of the judge in regulating the order of proof, except that which has reference to testimony bearing on the question of damages. This last it is unnecessary to consider, because the plaintiff having failed to establish his case on the merits and to show any claim for compensation, cannot be aggrieved by any ruling relating to damages merely.

The burden of proof was clearly on the plaintiff to show want of due care on the part of the defendants, as well as the exercise of ordinary care by himself at the time of the accident.

Public Debt of Canada.

The public debt consists of Imperial Guaranteed Loan, bearing 4 per cent. interest, and constituting a first charge on the Consolidated Revenue Fund, £1,500,000; sterling debentures 5 per cent., payable in London, £279,355; ditto 6 per cent., ditto, £7,223,600; currency debentures, 4½ per cent., payable in Canada, £3,000; ditto 5 per cent., do., £147,683; do. 6 per cent., do., £524,064; total, £9,677,672, chargeable on Consolidated Revenue Fund, and bearing an annual interest of £546,345. In addition to the foregoing amount, the Province, as Trustee for the Consolidated Municipal Loan Fund and for other special funds, has issued debentures chargeable specially upon the security of such funds, and not upon the Consolidated Revenue, to the following amount: Sterling debentures chargeable on the Consolidated Municipal Loan Fund, payable in London, 6 per cent., £200,000; currency and sterling do., do., payable in Canada, £1,720,160; currency debentures, 6 per cent., chargeable on minor special funds, payable in Canada, £63,178—£1,983,338; bearing an annual interest of £119,000 sterling. The whole direct and indirect debt of Canada, may be, therefore, classed: Imperial Guaranteed Loan, £1,500,000; sterling debentures, payable in London, £7,702,925; currency and sterling, payable in Canada, £2,458,085; total, £11,661,010; the total charge for interest being £665,345. The Lords of the Treasury now hold in investment on account of the sinking fund for the redemption of the Imperial Guaranteed Loan—3 per cent. Reduced Annuities, £619,030; Indian bonds, 1858, £174,000; total, £793,030. And an annual contribution of £30,000, in addition to accumulating interest, is made by the province to this fund; the charge upon the revenue being thus: Interest on £1,500,000 at 4 per cent., £60,000; sinking fund, at 2 per cent., £30,000; £90,000 per annum. The balance yet remaining due being only £707,000, to be reduced in January by the sum of £30,000, now in course of remmittance from Canada. By an arrangement with the Lords of the Treasury, it is agreed that the sinking fund may be invested in approved securities, bearing a rate of interest nearly approaching that paid by Canada, to raise the amount required to make good the entire sinking fund, and thus to discharge the Province from the necessity of providing from its consolidated revenue any larger sum than the interest on the balance of about £700,000, by which means an annual charge of about £35,000 will be substituted for that of £90,000, while some profit will arise from the sinking fund being invested in securities yielding a higher rate than that payable under the guarantee 4 per cent. The Government of Canada also are themselves holders of securities purchased on account of special funds, to the amount of, sterling, £724,777. Almost the whole of this sum consists of the currency debentures of the province, whose indebtedness is really to this extent diminished. By the terms of the charters granted to the provincial banks, they are required to hold as security for their issues, provincial debentures to the extent of 10 per cent. of their capital. The amount so held is now about £500,000 sterling, which is thus withdrawn from sale. During the past year 1859, the Government have come under obligations to the extent of about £400,000, which

has been applied to the redemption of the securities before enumerated. And it is proposed now to raise the necessary capital for the pupose of redeeming all the outstanding currency debentures, most of which are held in England. By substituting the direct engagement of the province in lieu of that of the Municipal Loan Fund and other special funds, and by making the principal and interest payable in London, it is expected that the holders of these depreciated securities will be glad to avail themselves of the opportunity now offered of redemption, or of accepting the new consols or bonds in lieu of their present bonds, while, by interposing its own security, the province will obtain a large reduction on the amount charged for interest. After deducting the securites now held by the Government of Canada, those already purchased for the purpose of redemption, and also those held under the bank charters, there remains the sum of about £1,250,000 still outstanding of the currency and Municipal Loan Fund bonds. Under the terms of the act providing for the redemption of the feudal tenure in Lower Canada, a fund was created for the purpose of indemnifying the seigniors, amounting to about £650,000 sterling, the interest upon which, at 6 per cent., is now a charge upon the Consolidated Revenue Fund; and of this amount £250,000 will be required in the course of the year 1860. The Government propose now to make provision for the payment of this sum, which will constitute no addition to the present liabilities of the province, but will reduce the interest from 6 per cent. to 5 per cent.

The Government has also to provide the sum of £200,000 for the erection of the public buildings at the new provincial seat of Government. This amount will be required in the course of 1860 and 1861. And to this extent only does the Government of Canada now propose to make any addition to their existing liabilities.

It is, therefore, proposed to create an issue of Consolidated Stock or Bonds, at the option of the purchaser, irredeemable until after twenty-five years from 1st January, 1860, bearing 5 per cent. interest, payable half-yearly, for the following purposes: To pay up in full the sinking fund for the Imperial Guaranteed Loan, about £700,000; to reimburse the Consolidated Revenue Fund for advances made in 1859 on account of redemption of debt, £400,000; to redeem so much of the Feudal Tenure Fund, £250,000; for public buildings at Ottawa, £200,000; for redemption of remainder of 6 per cent. currency debt, both direct and indirect, about £1,250,000—£2,800,000. The charges now borne by the revenue on the foregoing items, are as follows: Interest and sinking fund, imperial loan, £90,000; 6 per cent. interest on £2,100,000, £126,000; total per annum, £216,000. By the issue of 5 per cent. consols or bonds, the annual charge will be reduced to—for interest, £140,000; for sinking fund, ⅛ per cent., £7,000; total, £147,000; making a reduction of charge upon the revenue of Canada of £69,000 per annum, while, at the same time, the existing Imperial Sinking Fund will by this operation be increased to £1,500,000, thus practically extinguishing so much of the present debt. The Consolidated Stock or Bonds will be issued at par, bearing interest from January 1. Until 30th June next subscribers who are holders of Provincial Government 6 per cent. bonds, payable in Canada, and having the direct engagement of the Consolidated Revenue Fund, will be permitted to pay their subscriptions to the new stock or bonds in these securities at par (viz: £1 4s. 4d. currency for £1 sterling,) adding one-quarter per cent. premium for each year the bond may have to run. Thus, a bond having twenty years to mature will be taken at 105, payable in the new stock or bonds at par. Subscribers who are holders of Consolidated Municipal Loan Fund bonds will be permitted to exchange them at par for the new stock or bonds—viz: £1 4s. 4d. currency for £1 sterling. In order to facilitate the consolidation of the entire debt of the province, the Government are prepared to convert the sterling 6 per cent. bonds, payable in London, and carrying a direct charge upon the Consolidated Revenue Fund, into new stock or bonds of the same character as those now to be disposed of, and to be issued under the authority of the same act, at the following rates:

£	s.	d.	New Stock or Bonds.	6 per cent. b'ds due—
109	10	0	5 per cent. for £100	Aug., 1874
110	12	6	" " "	Sept., 1876
111	0	0	" " "	July, 1877
111	5	0	" " "	Jan., 1878
111	12	6	" " "	Jan., 1879
112	0	0	" " "	Jan., 1880
112	3	9	" " "	July, 1880
112	11	3	" " "	July, 1881
112	15	0	" " "	Jan., 1882
112	17	6	" " "	July, 1882
113	0	0	" " "	Jan., 1883
113	3	9	" " "	July, 1883
113	7	6	" " "	Jan., 1884
113	10	0	" " "	July, 1884

Holders of 5 per cent. sterling bonds may convert at par; but neither class of such sterling bonds payable in London can be received in payment of subscriptions to the new loan. The option of conversion is limited to the 30th June, 1860.

Statesville and Charlotte Railroad.

On last evening, Mr. Johnston, President of the Charlotte Railroad, appeared before the City Council for the purpose of calling their attention to the railroad now being built from Charlotte to Statesville. This connection will form a very important feeder to the Charlotte and South Carolina Railroad.—*Carolinian.*

New York and New Haven Railroad.

The result of the operations of this company, for the year ending on the 31st day of March, 1859, has been as follows:

Income.

From Passengers	$624,795 43
" Freight	157,949 77
" Mails, Expresses, &c.	45,946 75
	$828,691 95

Expenses.

For Transp'tion expenses	$198,114 17	
" Repairs of road, &c..	76,767 09	
" " equipment	114,285 26	
" Fuel, oil and waste..	95,181 25	
" Haul. by horse power.	28,511 56	
		512,859 33
Net earnings for the year		$315,832 62

The Canal Railroad.

The earnings of this road for the year have been as follows:

Receipts.

		Plainville Lease.	Extension Lease.
April,	1858	$6,903 52	$2,591 42
May,	"	8,723 23	3,036 63
June,	"	7,758 20	2,135 77
July,	"	8,576 33	2,669 83
August,	"	7,852 82	2,935 89
September,	"	9,060 70	3,115 01
October,	"	8,420 93	3,723 62
November,	"	7,545 84	2,854 94
December,	"	6,073 36	2,234 10
January,	1859	5,767 89	2,012 44
February,	"	5,704 11	2,030 32
March,	"	6,676 09	2,712 92
Mail compensation		2,025 00	2,011 85
		$91,088 02	$34,064 74

Expenses.

	Plainville Lease.	Extension Lease.
Operating road	$45,626 95	$33,663 14
Rent of road	50,362 67	28,000 00
	$95,989 62	$62,663 14
Loss on Plainville Lease		$4,901 60
Loss on Extension Lease		27,598 40
Total loss,		$32,500 00

Condensed Balance Sheet. Dr.

Railroad, including the franchise, right of way, grading, masonry, bridging, fencing, superstructure and iron, station houses, shops, fixtures, machinery, furniture, engineering, agencies, interest, &c., &c.	$4,579,879 54
Equipment, viz: Locomotives and tenders, cars, &c.	661,546 54
Real estate, including leases, in the cities of New York and N. Haven	65,343 16
Materials, viz: Lumber, iron, fuel, oil, &c., &c.	170,716 60
Mortgage Bonds, on hand, available for exchange, and constituting part of the $330,500 of Registered Bonds not issued and in the Bank of the Republic	55,500 00
Cash	31,445 59
	$5,582,431 43

Cr.

Capital stock, 30,000 shares	$3,000,000 00
Bonds, due December 1st, 1860, with 7 per cent. Coupons, payable on the first days of June and December in each year	311,000 00
Bonds, due January 1st, 1861, with 6 per cent. Coupons, payable on the first days of July and January in each year	14,000 00
Bonds, due December 1, 1866, with 7 per cent. Coupons, payable on the first days of June and December, in each year	964,000 00
Bonds, secured by mortgage, due October 1st, 1875, with 6 per cent. Coupons, payable on the first days of April and October in each year.	930,000 00
Profit and Loss, being the surplus of earnings after paying all demands upon them	330,398 66
Accounts Payable, consisting of coupons due, dividends and balance due other roads, not yet called for	33,037 77
	$5,582,431 43

Wilmington, Charlotte and Rutherford R.R.

In our issue of 14th inst. we gave a notice of this road, compiled chiefly from an article in the Wilmington *Herald*, which contained some errors—one of which (that referring to the distance apart of the cross-ties) is calculated to convey an unfavorable impression of the road. The *Herald* no doubt fell into the error from the fact that the company at one time, while putting down track, were obliged to lay it with about one-third of the requisite number of ties, because a temporary failure on the part of the contractors to supply a sufficient quantity in time. The following, in reference to this road, is from an authentic source, and may be relied upon as correct:

"The road when completed will be 270 miles long, viz: the Eastern Division from Wilmington to Charlotte, 190 miles, and Western Division, from Charlotte to Rutherford, 80 miles. It is graded, as are all our roads at the South, for a single track only. The superstructure will consist of a T rail weighing 50 lbs. per lineal yard, placed upon cross-ties 22 inches apart, from centre to centre; the ties of heart pine, or oak, seven by nine inches, and eight feet long.

"On the Eastern Division, 28 miles of track were laid last year. This year it is hoped that we will be able to lay the road on the Eastern Division to Rockingham, in Richmond County.

"On the Western Division track-laying will be commenced about the 1st of April next, with the expectation of completing by the end of the year, 50 miles."

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil." Running *dots* (....) signify "not ascertained." Land-Grant Railroads are in "*italics*."

Years ending.	Railroad. Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.	Road in progress or projected.	Equipment. Engines.	Cars. Passenger.	Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Liabilities. Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Net.	Dividends.	Price of shares.
	M.	M.	M.	M.	No	No	No.		$	$	$	$	$	$	$	M.	M.	$	$	p. c.	p. c.
								ALABAMA.													
30 Jun. '59	43.3	—	....	72.3	3	2	19	*Alabama and Florida*	1,086,278	*	—	539,396	473,500	101,205	1,127,174	27.3	.....	50,430	22,359	—	....
28 Feb. '59	30.3	—	....	58.1	2	2	19	*Alabama and Mississippi*	461,505	30,991	—	335,010	109,500	21,632	518,965	30.3	.....	55,791	31,852	—	....
31 May '59	99.2	—	....	68.4	7	7	84	*Ala. and Tennessee Rivers*	2,101,007	144,549	—	1,054,915	713,226	212,496	2,264,468	99.2	.....	155,628	78,907	—	....
30 Jun. '59	57.0	—	....	171.3	...	...	.....	*Mobile and Girard*	1,500,000	*	—	.....	.....	.....	.....	57.0	.....	76,773	21,006	—	....
1 Jan. '59	319.2	14.7	....	213.0	25	18	361	*Mobile and Ohio*	7,252,801	681,859	114,894	3,441,859	4,051,547	726,546	8,360,702	202.0	.....	769,787	420,000	—	....
28 Feb. '59	88.5	28.4	....	—	20	14	272	Montgomery and West Point	1,819,403	279,435	100,000	1,419,672	922,621	18,956	2,462,492	116.9	.....	446,153	211,880	6	....
16 Dec. '59	—	—	—	295.8	—	—	—	*North East and South West*	728,000	*	—	105,760	.....	.....	.....	—	—	—	—	—	....
.. .. ..	—	—	—	26.1	—	—	—	Tennessee and Ala. Central	.....	.....	.....	.....	.....	.....	.....	—	—	—	—	—	....
								ARKANSAS.													
.. .. ..	—	—	—	301.4	—	—	—	Cairo and Fulton	.....	.....	.....	.....	.....	.....	.....	—	—	—	—	—	....
30 Nov. '58	38.5	—	....	107.5	...	...	.....	Memphis and Little Rock	553,877	*	—	351,524	446,000	10,725	811,949	—	—	—	—	—	....
								CALIFORNIA.													
30 Sep. '59	22.5	—	....	41.8	...	...	.....	Sacramento Valley	1,547,100	*	—	791,100	756,000	—	1,547,100	22.5	.....	211,420	115,076	....	....
								CONNECTICUT.													
31 Jan. '59	23.9	—	....	—	3	6	30	Danbury and Norwalk	333,237	49,773	—	279,050	85,000	3,502	404,622	23.9	.....	56,044	20,618	6	....
30 Sep. '59	122.4	—	....	75.1	16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511	—	1,936,740	1,810,500	319,443	4,323,922	122.4	246,523	333,500	152,777	—	....
31 Aug. '59	61.4	10.6	....	—	...	...	.....	Hartford and New Haven	3,108,018	254,000	102,889	2,350,000	964,000	16,463	3,932,432	72.0	314,763	723,460	204,134	10	125
31 Dec. '58	74.0	—	....	—	11	19	212	Housatonic	2,438,847	*	8,559	2,000,000	278,500	76,675	2,555,837	159.0	.....	271,273	66,330	—	....
31 Dec. '58	57.0	—	....	—	7	15	178	Naugatuck	1,578,301	*	—	1,031,800	437,550	30,713	1,706,802	57.0	.....	199,536	314,068	—	....
30 Nov. '58	62.3	—	....	—	...	...	.....	N.Haven, N. London and Ston.	1,470,661	*	11,050	738,538	750,000	.....	1,488,538	50.1	.....	76,758	8,946	—	....
31 Dec. '58	46.4	8.8	....	—	...	...	.....	New Haven and Northampton	1,400,000	*	—	922,500	500,000	.....	1,481,723	55.2	.....	172,369	70,487	5	....
30 Nov. '58	66.0	—	....	—	5	5	167	N.Lond., Willimant. & Palmer	1,561,241	*	5,453	510,900	1,055,600	272	1,575,147	66.0	91,134	104,464	30,512	—	....
31 Mar. '58	62.2	—	63.8	—	29	72	368	New York and New Haven	4,593,698	661,547	—	3,000,000	2,219,002	79,722	5,582,071	74.0	432,024	932,550	231,560	3	....
31 Mar. '58	59.0	7.0	....	—	...	...	.....	Norwich and Worcester	2,245,406	176,792	—	2,522,300	324,130	59,614	2,598,672	66.0	.....	265,417	44,587	—	41
								DELAWARE.													
31 Dec. '58	71.0	—	....	19.4	—	—	—	Delaware	1,146,311	*	—	252,561	735,000	123,750	1,146,311	71.0	.....	66,628	—	—	....
30 Nov. '58	14.3	—	....	—	—	—	—	Newcastle and Frenchtown	699,514	—	25,000	762,320	—	—	767,278	14.3	.....	19,895	—	—	....
								FLORIDA.													
.. .. 59	154.2	—	....	—	—	—	—	*Florida*	.....	.....	—	.....	.....	.....	.....	—	—	.....	.....	—	....
30 Apr. '58	—	—	....	45.1	...	...	.....	*Florida and Alabama*	292,291	*	—	317,847	154,000	70,620	543,237	.....	.....	.....	.....	—	....
30 Jun. '59	31.3	—	2.0	28.6	2	1	24	*Flo., Atlantic and Gulf Central*	396,310	28,608	—	205,781	204,600	164,670	594,836	19.3	.....	10,255	1,504	—	....
.. .. '59	26.5	3.9	....	227.0	...	...	.....	*Pensacola and Georgia*	.....	.....	—	.....	.....	.....	.....	29.4	.....	.....	.....	—	....
								GEORGIA.													
31 July '58	86.7	—	....	—	15	11	105	Atlanta and La Grange	1,179,381	*	—	1,000,000	187,500	23,384	1,459,075	86.7	.....	362,061	197,357	8	125
.. .. '59	30.0	—	....	133.5	—	—	—	Atlantic and Gulf—M. Trunk	.....	.....	—	.....	.....	.....	.....	30.0	.....	.....	.....	—	....
31 Dec. '57	53.0	—	....	—	...	...	.....	Augusta and Savannah	1,032,200	*	—	733,700	298,500	.....	1,032,200	53.0	.....	125,427	69,679	—	....
30 Apr. '59	43.5	—	....	23.7	...	...	.....	Brunswick and Florida	755,000	*	—	151,887	.....	.....	.....	31.0	.....	.....	.....	—	....
30 Nov. '59	191.0	—	....	—	54	28	636	Central of Georgia	3,750,000	*	826,571	3,750,000	199,851	—	5,977,106	229.0	790,016	1,633,947	794,343	10	....
31 Mar. '59	171.0	61.0	....	—	...	...	.....	Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000	—	7,368,665	232.0	.....	1,154,621	544,363	8	100
30 Nov. '59	102.5	—	....	—	18	16	171	Macon and Western	1,500,000	*	—	1,438,800	96,000	7,101	1,967,776	102.5	213,180	375,250	209,785	11	96
31 July '59	50.0	—	....	—	7	2	107	Muscogee	774,244	162,534	—	669,950	249,000	—	1,026,868	50.0	.....	202,714	110,516	8	....
1 May '58	68.1	—	....	—	3	4	33	Savannah, Albany and Gulf	1,386,634	52,373	—	1,275,901	10,200	180,621	1,473,140	71.6	.....	.....	.....	—	....
31 July '59	106.1	56.5	14.8	44.3	15	18	166	South Western	3,165,000	*	—	2,254,000	631,000	.....	.....	147.2	171,758	547,876	337,769	—	....
30 Sep. '59	138.0	—	....	—	52	24	705	Western and Atlantic	5,901,497	*	—	built and	own'd by	State.	—	138.0	.....	832,343	454,541	—	....
								ILLINOIS.													
.. .. ..	220.0	—	....	—	—	—	—	Chicago, Alton and St. Louis	10,000,000	.....	—	3,500,000	4,500,000	.....	10,000,000	220.0	.....	.....	.....	—	....
30 Apr. '59	138.0	—	....	—	62	31	990	Chic., Burlington and Quincy	6,068,054	1,400,872	680,158	4,629,340	2,990,000	—	8,149,084	210.0	.....	1,044,573	171,515	—	....
31 Dec. '58	45.0	—	....	—	6	14	101	Chicago and Milwaukee	1,799,894	67,869	120,000	988,000	762,865	188,085	2,050,065	45.0	14 mo.	243,282	135,284	—	....
.. .. '58	138.0	—	....	75.0	...	...	.....	Chicago and Northwestern	.....	.....	—	4,250,000	6,350,000	2,500,000	13,330,000	138.0	.....	.....	.....	—	....
30 Jun. '58	181.8	—	....	—	58	57	960	Chicago and Rock Island	6,776,119	*	175,165	5,603,000	1,397,000	5,651	7,543,104	228.4	.....	1,407,846	629,029	—	62½
10 Nov. '58	33.2	—	....	—	...	...	.....	Fox River Valley	580,000	*	—	.....	580,000	.....	.....	84.0	.....	.....	.....	—	....
31 Dec. '58	121.0	138.5	73.6	—	60	63	1,369	Galena and Chicago Union	8,027,473	1,311,917	211,003	6,026,400	3,783,015	292,466	10,300,517	326.5	808,231	1,547,561	620,328	4	62
.. .. '57	175.0	—	....	—	...	...	.....	Great Western	5,022,926	*	—	1,600,000	3,088,426	334,500	5,022,926	175.0	.....	.....	.....	—	....
31 Dec. '58	454.8	252.5	....	—	113	96	2,305	*Illinois Central*	19,674,214	3,347,799	—	10,249,210	20,000,000	1,297,277	31,596,487	708.3	.....	1,976,578	556,624	—	57½
.. .. ..	—	—	—	81.5	—	—	—	Illinois River	.....	.....	—	.....	.....	.....	.....	—	—	—	—	—	....
.. .. ..	148.0	—	....	—	...	...	.....	Ohio and Mississippi	4,870,586	*	—	1,780,295	3,292,403	.....	.....	148.0	.....	.....	.....	—	....
.. .. ..	46.6	—	....	—	...	...	.....	Peoria and Bureau Valley	.....	.....	—	.....	600,000	.....	.....	oper	by Chic.	& R. Is.	125,000	—	....
.. .. ..	—	—	—	129.0	—	—	—	Peoria and Hannibal	.....	.....	—	.....	.....	.....	.....	—	—	—	—	—	....
.. .. '58	186.0	—	....	—	...	...	.....	Peoria and Oquawka	5,400,000	*	—	1,569,889	2,200,000	.....	.....	186.0	.....	.....	.....	—	....
31 Dec. '58	100.0	—	....	—	...	...	.....	Quincy and Chicago	1,978,555	*	—	800,000	1,200,000	.....	2,000,000	100.0	oper. by	Bur. &	Quincy.	—	....
.. .. ..	1.0	—	....	—	...	...	.....	Rock Island Bridge	.....	.....	—	.....	.....	.....	.....	oper	by Chic.	& R. Is.	.....	—	....
31 Dec. '58	168.5	39.8	12.2	—	31	30	424	Terre Haute, Alton & St. Louis	7,608,958	628,487	—	3,026,903	5,035,615	741,040	8,865,252	208.3	.....	823,767	.....	—	....
								INDIANA.													
.. .. ..	108.0	—	....	—	...	...	.....	Cincinnati and Chicago	2,080,433	*	—	1,196,679	1,006,125	.....	.....	108.0	.....	.....	.....	—	....
.. .. ..	29.0	—	....	73.0	...	...	.....	Cincinnati, Peru and Chicago	.....	.....	—	.....	.....	.....	.....	29.0	.....	.....	.....	—	....
31 Aug. '57	109.0	—	....	—	...	...	.....	Evansville and Crawfordsville	2,233,413	*	2,750	986,061	1,219,100	51,772	2,283,748	109.0	.....	249,867	119,432	—	....
1 Jan. '58	72.4	—	....	—	19	21	278	Indiana Central	1,666,280	244,081	25,641	611,050	1,166,000	47,850	2,111,059	109.0	.....	368,189	132,094	6	58
31 Dec. '58	89.8	20.2	....	—	23	19	313	Indianapolis and Cincinnati	2,497,952	540,043	25,689	1,689,900	1,362,284	140,689	3,458,108	110.0	.....	448,858	230,834	9	49
31 Dec. '58	84.0	—	....	—	...	...	.....	Ind., Pittsburg and Cleveland	1,904,956	*	10,000	835,971	1,025,200	19,719	2,109,336	84.0	.....	232,905	92,859	—	....
31 Aug. '57	78.0	—	....	—	...	...	.....	Jeffersonville	1,839,576	*	—	1,014,252	681,000	99,400	.....	108.0	.....	222,737	74,328	—	....
.. .. '59	64.0	—	....	—	...	...	.....	Lafayette and Indianapolis	1,850,000	*	—	1,000,000	600,000	.....	2,000,000	64.0	.....	.....	.....	—	....
.. .. '58	86.0	49.0	....	—	...	...	.....	Madison and Indianapolis	2,984,516	*	—	1,647,700	1,336,816	.....	.....	135.0	.....	206,114	82,632	—	....
.. .. '58	288.0	—	....	—	...	...	.....	Louisv., N. Albany & Chicago	6,000,000	*	*	2,800,000	3,000,000	2,000,000	6,000,000	288.0	.....	645,827	371,402	—	....
.. .. '58	74.0	—	....	—	...	...	.....	Peru and Indianapolis	2,000,000	*	*	1,100,000	820,000	80,000	2,000,000	74.0	.....	.....	.....	—	....
30 Nov. '59	73.0	—	....	—	18	25	298	Terre Haute and Richmond	1,611,450	*	26,029	1,381,450	230,000	—	1,867,423	73.0	254,742	357,297	182,154	10	....
								IOWA.													
1 Jun. '58	75.5	—	....	201.5	...	...	.....	*Burlington and Missouri*	1,514,257	*	—	752,733	665,000	92,663	1,542,768	50.0	.....	.....	.....	—	....
.. .. '59	86.0	—	....	—	...	...	.....	Chicago, Iowa and Nebraska	1,350,000	*	—	516,072	860,000	369,084	.....	86.0	.....	.....	.....	—	....
31 May, '58	50.1	—	....	269.0	8	8	86	Dubuque and Pacific	1,579,988	166,823	—	838,086	965,000	441,787	2,267,313	50.1	.....	.....	.....	—	....
.. .. ..	—	—	—	438.0	—	—	—	Iowa Central Air Line	.....	.....	—	245,000	755,000	.....	.....	—	—	—	—	—	....
1 Jun. '58	38.5	—	....	101.3	4	4	64	Keok., Ft. Desmoines & Minn.	1,037,876	82,499	—	921,449	570,000	.....	.....	38.5	11 mo's.	458,821	21,356	—	....
1 Jun. '59	11.2	—	....	57.3	...	...	.....	Keok., Mt. Pleasant and Musc.	745,703	*	—	548,216	414,000	60,452	1,022,608	11.2	.....	.....	.....	—	....
.. .. '59	55.0	52.6	....	312.0	...	...	.....	Mississippi and Missouri	4,198,000	*	—	.....	.....	.....	.....	107.6	.....	.....	.....	—	....
								KENTUCKY.													
31 Oct. '59	80.0	—	....	—	...	...	.....	Covington and Lexington	3,743,971	276,024	—	1,582,169	2,930,000	337,532	4,375,993	111.8	.....	426,408	227,534	—	....
30 Jun. '57	20.0	—	....	113.0	...	...	.....	Lexington and Big Sandy	694,024	*	—	sold.1859,	for $26,0	00.	.....	20.0	.....	.....	.....	—	....
.. .. '58	13.0	—	....	22.0	...	...	.....	Lexington and Danville	765,500	—	—	694,444	71,000	.....	.....	13.0	oper.by	Cov. &	Lex.	—	....
30 Jun. '59	29.0	—	....	—	...	...	.....	Lexington and Frankfort	590,401	52,300	—	514,409	130,000	—	712,322	29.0	.....	120,187	64,142	7	80
30 Jun. '59	65.1	—	....	—	...	...	.....	Louisville and Frankfort	1,379,345	122,750	—	741,069	496,519	8,097	1,623,088	65.0	.....	268,046	113,948	—	66
1 Oct. '58	99.0	37.5	....	85.0	10	9	135	Louisville and Nashville	3,580,826	254,154	—	2,151,430	2,300,000	320,132	4,890,700	60.0	.....	163,288	94,995	—	....
.. .. '59	18.8	—	....	70.2	—	—	—	Maysville and Lexington	.....	.....	—	.....	.....	.....	.....	18.8	oper.by	Cov. &	Lex.	—	....
								LOUISIANA.													
.. .. ..	22.0	—	....	—	...	...	.....	Clinton and Port Hudson	750,666	*	—	.....	.....	.....	.....	22.0	.....	.....	.....	—	....
.. .. ..	27.0	—	....	—	...	...	.....	Mexican Gulf	662,911	*	—	.....	.....	.....	.....	27.0	.....	.....	.....	—	....
31 Dec. '58	80.0	—	....	178.0	...	...	.....	*N. O. Opelousas and Gr. West'n*	3,382,948	362,291	—	1,002,959	2,121,000	549,997	4,529,986	80.0	.....	225,577	.....	—	....
31 Mar. '59	206.0	—	....	208.0	30	19	364	*N. O. Jackson and Gr. Northern*	5,639,562	613,613	—	4,437,990	2,817,000	183,685	9,147,852	206.0	.....	753,774	.....	—	....
31 Aug. '58	21.0	—	....	168.0	...	...	.....	*Vicksburg, Shreveport & Texas*	929,418	*	—	882,922	58,744	50,384	992,050	21.0	.....	.....	.....	—	....

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil." Running *dots* (.....) signify "not ascertained." Land-Grant Railroads are in "*italics*."

Years ending.	Railroad. Main Line.	Railroad. Lateral and Branch Lines.	Railroad. 2nd Track and Sidelings.	Road in progress or projected.	Equipment. Engines.	Equipment. Cars. Passenger.	Equipment. Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Property and Assets. Rolling-Stock.	Property and Assets. Invested in foreign works.	Liabilities. Share Capital paid in.	Liabilities. Bonded and Mortgage Debt.	Liabilities. Floating Debt.	Liabilities. Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Earnings. Net.	Dividends.	Price of shares
	M.	M.	M.	M.	No	No	No.		$	$	$	$	$	$	$	M.	M.	$	$	p. c.	p. c.
								MAINE.													
31 Dec. '58	32.0	—	.....	6.0	4	—	25	Androscoggin	645,271	*		145,787	511,500	.....	.....	32.0	22,001	30,957	17,263	—	.....
31 May, '59	55.0	—	.....	—	9	10	128	Androscoggin and Kennebec	2,210,947	*	27,925	457,900	1,748,457	101,209	2,307,566	137.0	73,186	281,929	89,766	—	.....
30 Jun. '59	149.0	—	25.0	—	41	17	349	Atlantic and St. Lawrence	6,066,375	857,566		2,494,900	3,472,000	9,572	5,976,472	149.0	429,791	545,741	150,228	6	.....
31 Dec. '58	12.5	—	.....	—	4	2	45	Bangor, Oldtown and Milford	175,232	*		135,000	.....	.....	175,516	12.5	25,437	33,059	16,530	.....	.....
31 Dec. '58	63.0	9.0	.....	—	12	11	109	Kennebec and Portland	2,871,264	*		1,107,526	1,763,738	.....	.....	72.5	169,240	145,074	70,746	—	.....
31 Dec. '58	—	—	—	23.0	...	...	...	Penobscot	308,413	.....		180,000	143,678	.....	.....	...	.....	.....	.....	—	.....
31 May, '59	54.7	—	.....	—	4	10	93	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,800	128,576	1,890,604	54.7	oper. by	An. & K.	67,324	—	.....
31 May, '59	51.3	—	.....	—	11	13	118	Portland, Saco and Portsmouth	1,494,792	*	5,208	1,500,000	.....	.....	1,500,000	51.3	141,664	208,299	104,029	6	92½
31 May, '59	37.0	—	.....	—	...	...	...	Somerset and Kennebec	783,763	*		169,200	556,600	.....	.....	37.0	.....	55,408	28,404	—	.....
31 May, '59	18.5	—	.....	33.5	...	...	...	York and Cumberland	1,090,000	*		370,000	450,000	270,000	1,090,000	18.5	.....	.....	.....	—	.....
								MARYLAND.													
30 Sep. '59	279.6	7.2	.....	—	235	124	3,272	Baltimore and Ohio	21,225,164	3,576,251	3,606,740	10,111,800	13,881,833	292,426	30,278,377	286.8	3,648,814	3,618,618	1,933,621	—	70½
30 Sep. '59	30.0	—	.....	—	7	33	167	Washington Branch	1,650,000	*		1,650,000	.....	.....	1,824,806	30.0	187,427	442,219	268,540	6	100
31 Dec. '58	138.0	4.0	.....	—	42	38	1,455	Northern Central	6,843,457	733,934	220,965	2,260,000	5,395,800	655,507	8,681,557	154.5	606,482	810,604	364,649	—	154
								MASSACHUSETTS.													
30 Nov. '58	21.2	—	.....	—	6	4	80	Berkshire	600,000	*		600,000	.....	.....	600,000	ope	rat. by	Housat.	42,000	7	.....
30 Nov. '58	26.8	1.8	43.6	—	20	26	544	Boston and Lowell	2,239,253	183,345		1,830,700	440,000	21,965	2,619,210	28.6	274,655	407,399	166,109	6	99½
31 May, '59	74.3	7.4	50.8	—	30	39	540	Boston and Maine	3,847,004	368,357	105,937	4,076,570	.....	.....	.....	81.7	.....	818,681	399,657	7½	105½
31 Dec. '57	74.5	—	2.1	—	...	...	...	Boston and New York Central	3,622,203	69,941		2,241,000	374,550	1,299,039	3,923,319	74.5	.....	88,483	7,052	—	.....
30 Nov. '58	43.5	12.0	22.8	—	22	27	200	Boston and Providence	3,333,807	191,175		3,160,000	195,220	.....	3,862,710	55.5	292,649	527,764	259,176	6	104½
30 Nov. '58	44.7	24.0	59.2	—	31	64	697	Boston and Worcester	4,251,682	437,416	100,000	4,500,000	500,000	60,774	5,578,160	68.7	498,325	923,223	332,270	6	104
30 Nov. '58	46.1	1.1	2.7	—	7	10	109	Cape Cod Branch	907,761	123,864		681,689	144,600	114,417	.....	47.2	78,282	106,846	49,483	—	.....
30 Nov. '58	50.0	2.4	8.9	—	12	13	330	Connecticut River	1,614,364	187,558	20,000	1,591,100	223,000	28,000	.....	75.4	158,815	238,390	90,877	2	72
31 May, '59	44.2	36.4	19.4	—	28	46	320	Eastern	4,134,475	456,523	262,102	2,853,400	2,105,500	172,218	5,128,719	100.5	373,641	663,135	319,526	—	58
30 Nov. '58	19.9	1.3	2.8	—	...	...	...	Essex	742,592	4,416		299,107	277,961	197,423	774,492	ope	rat. by	Eastern	12,295	—	40½
30 Nov. '58	50.9	16.8	70.1	—	29	28	643	Fitchburg	3,189,851	250,149		3,540,000	.....	131,453	3,863,710	67.7	303,392	572,967	278,855	6	91
30 Nov. '58	14.0	—	2.4	—	3	3	45	Fitchburg and Worcester	293,658	40,226		210,000	64,200	65,735	.....	26.0	35,567	35,476	12,849	6	—
30 Nov. '58	9.0	—	9.0	—	...	...	...	Grand Junction (Boston)	.....	.....		.....	.....	.....	.....	9.0	.....	.....	.....	—	.....
30 Nov. '58	24.9	—	2.0	—	...	...	...	Hampshire and Hampden	598,299	.....		292,651	200,000	105,649	.....	ope	r. by N.	H. & N'h	23,294	—	.....
30 Nov. '58	12.4	—	2.3	—	2	3	28	Lowell and Lawrence	332,883	30,275		200,000	100,000	.....	.....	12.4	22,455	42,784	18,540	3	.....
30 Nov. '58	14.6	—	17.1	—	12	11	301	Nashua and Lowell	558,919	95,684		600,000	.....	.....	.....	14.6	123,395	180,085	71,505	8	106
30 Nov. '58	20.1	1.4	1.1	—	7	18	144	New Bedford and Taunton	493,059	51,906		500,000	.....	12,600	.....	21.5	52,220	137,914	28,968	—	.....
30 Nov. '58	26.9	—	2.4	—	5	9	43	Newburyport	570,086	59,096		220,240	198,520	221,335	.....	36.0	70,236	44,974	9,257	—	.....
30 Nov. '58	8.6	—	0.4	23.4	...	...	...	N. York and Boston Air Line	416,133	.....		223,176	673,210	4,643	.....	8.6	18,093	16,606	1,647	—	.....
30 Nov. '58	79.5	7.8	25.1	—	25	46	359	Old Colony and Fall River	3,028,445	334,503		3,015,100	161,500	30,935	3,748,970	87.3	365,197	551,399	257,060	6	106½
30 Nov. '58	18.6	—	0.8	—	1	2	1	Pittsfield and North Adams	432,430	11,247		450,000	.....	.....	450,000	ope	r. by We	stern.	27,000	6	.....
30 Nov. '58	43.4	—	14.9	—	12	18	374	Providence and Worcester	1,534,911	254,565		1,550,000	300,000	46,500	1,897,369	43.4	199,895	270,402	110,344	6	97
30 Nov. '58	16.9	—	1.7	—	3	3	198	Salem and Lowell	366,987	82,543		243,305	226,900	.....	.....	16.9	29,822	50,856	.....	—	.....
30 Nov. '58	21.9	—	.....	—	...	...	...	Stockbridge and Pittsfield	444,600	4,100		448,700	.....	.....	450,000	ope	r. by Ho	usaton.	31,409	7	.....
30 Nov. '58	7.1	—	.....	35.5	...	...	...	Troy and Greenfield	329,741	.....		288,428	169,000	9,854	.....	...	.....	.....	.....	—	.....
30 Nov. '58	69.0	8.0	5.5	—	12	8	194	Vermont and Massachusetts	3,309,287	207,343		2,214,225	1,003,675	6,500	.....	77.0	99,256	225,079	105,037	—	103
30 Nov. '58	173.4	—	94.3	—	72	47	1,149	Western (incl. Alb. & W.S. etc.)	9,785,569	1,095,713	15,120	5,150,000	6,032,520	243,800	13,528,766	210.6	944,951	1,700,293	809,363	8	108½
30 Nov. '58	45.7	—	8.8	—	10	8	145	Worcester and Nashua	1,279,936	140,961		1,141,000	200,000	31,210	1,416,555	45.7	152,803	185,127	83,849	5¼	56
								MICHIGAN.													
1 Jun. '59	17.3	—	.....	2.7	2	1	100	*Bay de Noquet and Marquette*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
30 Sep. '59	57.0	—	.....	—	...	...	...	Chic. Detroit & Can. G.T. Junc.	built and	equipp	ed by G	r. Tr'k R.	R. Co. of	Canada	.....	.....	.....	.....	.....	—	.....
1 Jan. '59	188.0	—	.....	—	...	...	...	*Detroit and Milwaukee*	8,270,623	647,596		2,329,155	4,707,500	.....	9,008,369	188.0	.....	365,038	144,270	—	.....
-- -- --	—	—	—	—	—	—	—	*Flint and Pere Marquette*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
-- -- --	—	—	—	183.0	—	—	—	*Grand Rapids and Indiana*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
31 May, '59	284.0	—	.....	—	98	123	1,528	Michigan Central	12,847,238	*	1,149,069	6,057,840	8,284,063	119,089	14,548,411	329.0	.....	2,417,915	886,697	—	36½
1 Mar. '59	246.0	293.0	.....	—	91	135	976	Mich. S'th'n & N'th'n Indiana	14,517,892	1,607,906	1,312,534	8,975,400	9,343,000	816,460	19,595,407	539.0	.....	2,019,425	777,273	—	6
-- -- --	—	—	—	89.8	—	—	—	*Port Huron and Milwaukee*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
								MINNESOTA.													
-- -- '59	—	—	—	620.0	—	—	—	*Minnesota and Pacific*	.....	.....		.....	600,000	.....	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	175.0	—	—	—	*Southern Minnesota*	.....	.....		.....	575,000	.....	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	112.5	—	—	—	*Minneapolis and Cedar Rapids*	.....	.....		.....	600,000	191,130	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	200.0	—	—	—	*Minnesota Transit*	.....	.....		.....	500,000	.....	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	60.0	—	—	—	*Root River Valley*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
								MISSISSIPPI.													
1 May, '59	146.5	—	.....	41.7	11	6	155	*Mississippi Central*	3,395,965	*		1,641,947	1,346,363	383,129	3,717,469	146.5	.....	239,585	117,371	—	.....
1 Oct. '59	71.4	—	.....	27.8	7	4	41	*Mississippi and Tennessee*	1,254,894	159,018		798,285	456,949	275,060	1,974,444	59.7	.....	176,462	116,433	—	.....
31 Dec. '58	83.2	—	.....	60.4	...	...	...	*Southern Mississippi*	2,750,000	*		1,000,000	1,400,000	.....	.....	83.2	.....	250,047	121,659	—	.....
								MISSOURI.													
30 Nov. '58	12.0	—	.....	65.8	1	...	.....	*Cairo and Fulton*	281,645	9,200		50,493	327,000	50,892	128,386	12.0	.....	.....	.....	—	.....
30 Aug. '59	206.8	—	.....	—	...	...	...	*Hannibal and St. Joseph*	14,438,612	*		1,770,612	8,768,000	900,000	11,438,612	206.8	.....	603,777	333,442	—	—
31 Oct. '58	168.8	—	.....	68.0	...	...	.....	*North Missouri*	5,396,527	235,994		2,620,000	3,250,000	48,006	6,018,106	168.0	.....	256,159	.....	—	—
-- -- --	—	—	—	—	—	—	—	*Platte County*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	—
28 Feb. '59	163.0	19.0	.....	119.0	26	26	412	*Pacific*	8,621,659	614,782		3,330,657	8,203,000	754,837	12,288,494	182.0	.....	676,310	301,503	—	.....
31 Oct. '58	19.0	—	.....	264.0	...	...	.....	*South-Western Branch*	1,226,010	.....		66,974	1,400,000	.....	.....	...	.....	.....	.....	—	.....
31 Oct. '58	86.5	—	.....	—	...	...	.....	*St. Louis and Iron Mountain*	4,916,189	283,869		1,999,300	3,276,000	171,103	5,446,403	86.5	.....	152,371	.....	—	.....
								NEW HAMPSHIRE.													
31 Mar. '59	23.1	—	3.2	—	...	...	...	Ashuelot	506,000	.....		246,018	150,000	109,982	506,000	ope	r. by Con	n. River	30,000	—	.....
31 Mar. '59	93.5	—	5.6	—	14	10	232	Boston, Concord and Montreal	2,580,134	283,450	8,219	1,800,000	1,050,000	165,883	3,015,880	93.5	353,000	227,720	86,338	—	8
30 Nov. '58	53.6	—	8.2	—	18	11	289	Cheshire	2,758,565	322,266		2,085,925	784,900	121,500	3,082,757	53.6	248,469	297,332	108,517	—	10
30 Nov. '58	28.5	—	3.7	8.5	5	7	33	Cocheco	769,433	81,025		399,140	421,120	46,399	866,659	28.5	32,618	44,709	17,063	—	.....
31 Mar. '59	34.5	—	44.0	—	21	22	494	Concord	1,500,000	*	57,513	1,500,000	.....	66,506	1,564,506	34.5	334,532	459,659	128,366	8	58
30 Sep. '59	46.8	—	.....	—	...	...	...	Concord and Portsmouth	250,000	*		250,000	.....	.....	250,000	ope	r. by Con	cord.	15,000	—	.....
31 Mar. '59	14.6	—	.....	—	...	...	...	Contoocook River	200,000	.....		200,000	.....	.....	200,000	14.6	4,182	16,603	1,528	—	.....
30 Nov. '58	16.8	—	.....	—	...	...	...	Eastern	525,205	.....		.....	.....	.....	525,205	ope	r. by Eas	tern Ma	ss.	—	85
31 Mar. '59	20.5	—	.....	25.8	3	2	27	Great Falls and Conway	433,404	40,887		166,748	209,927	42,219	477,476	20.5	30,960	24,027	12,450	—	.....
31 Mar. '59	26.8	—	.....	—	...	...	...	Manchester and Lawrence	1,000,000	.....		863,400	33,800	108,259	1,005,459	ope	r. by Con	cord.	88,577	8	82
31 Mar. '58	53.8	—	4.2	—	2	4	80	Merrimac and Conn. Rivers	1,281,504	*		595,587	383,400	303,393	1,282,380	53.8	33,170	59,774	21,156	—	.....
31 Mar. '59	69.2	12.8	10.4	—	22	13	372	Northern New Hampshire	3,343,167	*	33,750	3,068,400	299,500	25,800	3,393,900	82.0	268,657	353,101	187,136	4	47
30 Apr. '59	24.7	—	2.2	—	5	2	50	Sullivan	847,032	78,832		500,000	750,000	262,516	1,512,416	24.7	49,000	63,874	19,897	—	.....
								NEW JERSEY.													
30 Nov. '58	64.2	—	.....	—	...	...	...	Belvidere Delaware	3,173,285	*		1,100,000	2,036,000	197,801	.....	76.0	.....	237,446	95,736	—	.....
30 Nov. '58	63.9	32.3	.....	8.0	...	...	...	Camden and Amboy	5,376,795	*	5,972,076	3,798,400	8,567,800	.....	11,490,489	96.2	.....	1,649,328	766,160	8	122½
30 Nov. '58	60.2	—	.....	—	...	...	...	Camden and Atlantic	1,787,970	*		656,635	1,006,800	439,085	1,787,470	60.2	.....	133,222	57,965	—	.....
1 Apr. '59	64.0	—	.....	—	30	21	256	Central of New Jersey	5,042,163	424,700		2,200,000	3,186,000	175,000	5,580,981	64.0	488,871	870,954	520,872	10	.....
-- -- '59	—	—	—	2.6	—	—	—	Long Dock	1,000,000	.....		.....	1,000,000	.....	.....	.....	.....	.....	.....	—	.....
31 May, '59	53.0	—	.....	45.5	11	15	91	Morris and Essex	1,613,361	*	57,000	1,157,805	340,000	262,738	1,760,562	53.0	.....	239,179	110,040	3	.....
31 May, '59	33.8	—	.....	—	...	...	...	New Jersey	3,225,532	313,295		3,749,000	711,420	342,297	4,802,717	33.8	398,784	903,458	554,087	10	130
31 May, '59	21.3	—	.....	—	2	6	17	Northern New Jersey	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
30 Nov. '58	13.5	—	.....	—	...	...	...	Paterson and Hudson	630,000	.....		630,000	.....	.....	630,000	ope	r. by N.	Y. & E.	53,400	8	.....
30 Nov. '58	15.0	—	.....	—	...	...	...	Paterson and Ramapo	350,000	.....		248,225	100,000	1,200	350,000	ope	r. by N.	Y. & E.	26,500	5½	.....
30 Nov. '58	18.7	—	.....	—	...	...	...	Warren	1,568,713	*		968,000	600,000	713	1,607,085	18.7	6 mo.	193,241	96,620	5½	.....
30 Nov. '58	13.0	—	.....	47.0	...	...	...	West Jersey	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	—

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil." Running *dots* (.....) signify "not ascertained." Land-Grant Railroads are in "*italics.*"

Years ending.	Railroad. Main Line.	Railroad. Lateral and Branch Lines.	Railroad. 2nd Track and Sidings.	Road in progress or projected.	Equipment. Engines.	Equipment. Cars. Passenger.	Equipment. Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Liabilities. Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance. Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Earnings. Net.	Dividends.	Price of shares.
	M.	M.	M.	M.	No	No	No.		$	$	$	$	$	$	$	M.	M.	$	$	p. c.	p. c.
								NEW YORK.													
30 Sep. '58				140.0				Albany and Susquehanna	227,356			275,793		8,697							
30 Sep. '58	32.9		3.3		5	12	53	Albany, Vermont and Canada	1,557,502	136,038		439,005	1,575,099	50,000		32.9	93,894	84,119	11,215		
30 Sep. '58	38.3		34.0					Albany and West Stockbridge	2,289,934			1,000,000	1,289,934			ope	r. by W	estern.		6	
30 Sep. '58	34.9	2.6	.....	73.6	4	6	39	Black River and Utica	1,153,069	81,405		804,648	662,500	52,570		37.5	34,424	60,524	32,413		
30 Sep. '58	14.8		1.6					Blossburg and Corning	496,661			250,000	220,000			14.8	16,580	23,554	9,204	5	
30 Sep. '59	142.0		13.6	18.5	28	32	386	Buffalo, New York and Erie	3,150,762	*	164,200	680,000	2,592,221	252,142	4,206,709	176.0		541,249	172,321		
30 Sep. '58	68.3		18.0		28	34	312	Buffalo and State Line	2,460,251	312,736		1,913,000	1,049,000	172,378		87.8	356,145	814,116	359,609	6	
30 Sep. '58	24.6		38.1					Cayuga and Susquehanna	1,016,058	79,542		687,000	426,000	7,042		34.6	59,539	59,421	5,092		
30 Sep. '58	17.4		2.1					Chemung	400,000			380,000	70,000			ope	r. by N.	Y. & E.	24,000	7	
30 Sep. '58	46.8		2.9		10	8	83	Elmira, Canandaig'a & N. Falls								ope	r. by Re	ceivers.			
30 Sep. '59				63.2				Erie and New York City	287,708			352,742	14,000	28,716	396,416						
30 Sep. '58				15.0				Genesee Valley	91,889			59,374	38,500	23,404		ope	r.b.B.N.	Y. & E.			
30 Sep. '58	17.3		0.5		5	3	50	Hudson and Boston (West'rn)	148,000	27,000		175,000				17.3	49,519	58,207	10,840	6	
30 Sep. '59	144.0		106.5		52	107	542	Hudson River	10,205,906	1,182,372		3,758,466	8,842,000	414,644		150.0	700,224	1,842,636	770,096		41½
30 Sep. '58				73.8				L. Ontario, Auburn & N. York	74,203			75,771									
30 Sep. '58				182.0				L. Ontario and Hudson River	3,497,538	178,320		2,715,186	870,000	115,856							
31 Mar. '59	84.0	2.5	.....	8.5	19	34	185	Long Island	2,211,659	354,611	1,000	1,852,715	639,497	144,566		101.5	213,414	334,038	111,531		11⅛
30 Sep. '59	297.8	258.1	313.8		211	237	3,171	New York Central	25,164,200	5,257,077	588,980	24,000,000	14,333,771		40,366,005	655.9	3,945,128	6,200,848	2,791,419	7	78
30 Sep. '58	446.0	19.0	282.5		210	183	2,684	New York and Erie	29,909,749	4,148,885	973,083	11,000,000	26,371,511	1,707,575	39,079,086	495.0	3,000,369	5,151,616	1,086,575		8⅛
30 Sep. '58	130.8	2.1	30.9		35	89	430	New York and Harlem	7,303,339	634,777		5,717,100	5,151,287	147,640		152.9	621,747	975,853	358,792		9
30 Sep. '58	118.0	3.8	17.7		28	8	417	Northern (Ogdensburg)	4,086,712	702,079			1,494,000			121.8	311,404	410,806	127,013		
30 Sep. '58	35.9		2.2		7	6	44	Oswego and Syracuse	660,919	100,462		396,340	197,000	16,415		35.9	68,845	115,990	61,347	8	
30 Sep. '58	75.4		2.0		6	4	33	Pottsdam and Watertown	1,523,646	63,382		663,077	818,500	180,138		75.4	98,686	94,385	44,715		
30 Sep. '58	25.2		2.1		5	13	70	Rensselaer and Saratoga	743,977	156,573		610,000	140,000			46.2	89,380	208,223	33,946	3	
30 Sep. '58	18.4		1.3	32.6				Rochester and Genesee Valley	653,539			555,450	150,000	30,417		18.4	32,980	37,280	18,590	2	
30 Sep. '58	18.0		1.0			2	32	Sacketts Harbor and Ellisburg	371,556	17,714		167,485	278,400	56,810		18.0	17,620	12,025			
30 Sep. '58	21.0		1.6		2	3	10	Saratoga and Schenectady	480,684	*		300,000	86,500			ope	r.byRen	s. & Sar.	30,150	2½	
30 Sep. '58	40.9	6.6	3.9		9	12	84	Saratoga and Whitehall	820,518	74,904		500,000	395,000	5,456		54.5	107,506	139,388	32,196		
30 Sep. '58				13.2				Staten Island	40,000			40,000									
30 Jun. '59	11.0		.....					Brooklyn and Jamaica	369,856			284,850	85,000			ope	r.by Lo	ng Isl.	37,560	9	
30 Sep. '58	81.3		7.1		13	12	117	Syracuse, Binghampt. & N. Y.	2,857,607	*		1,200,130	1,500,000	59,418		81.3	148,240	177,627	74,359		
30 Sep. '58	27.2		3.2	7.7	7	4	65	Troy and Boston	1,296,302	125,887		568,297	797,500	231,083		27.2	61,614	125,042	53,289		
30 Sep. '58	6.0		0.1					Troy and Greenbush	258,658	36,073		275,000				ope	r. b.Hud	s. River.		6	
30 Sep. '58	2.1		2.1					Troy Union	732,114			30,000	680,000			ope	r. by oth	er Co's.			
31 Dec. '58	96.8		11.0		7	11	298	Watertown and Rome	2,159,295	*	28,000	1,498,500	690,000	85,071	2,278,611	96.8	215,605	397,712	187,000	6	
								NORTH CAROLINA.													
.. .. '58	95.2	2.0	.....					Atlantic and North Carolina	1,850,000	*		1,600,000	400,000			95.2					
.. .. '58	223.0		.....					North Carolina	4,235,000	*		4,000,000				223.0					
.. .. '59	97.0		.....					Raleigh and Gaston	1,240,241	*		973,300	126,200			97.0		206,917	108,541		
30 Sep. '59	161.0		17.1		22	20	144	Wilmington and Manchester	2,586,238	*	201,500	1,127,511	1,060,000	111,886	2,892,969	171.0		487,043	209,793		
30 Sep. '59	161.9				24	32	144	Wilmington and Weldon	2,869,223	*	107,000	1,340,213	791,055	102,391	3,114,954	171.0	323,069	477,554	235,201	8	
15 Mar. '58				43.0				Western North Carolina	190,793	*	[4,700	290,212		70,860	364,072						
								OHIO.													
.. .. '58			.....					Atlantic and Great Western	613,231			866,939		77,294							
31 Dec. '58	118.2		.....		17	12	208	Bellefontaine and Indiana	3,008,919	*	11,000	1,879,370	1,274,828	39,028	3,370,281	118.2		332,226	146,812		
1 Aug. '59	137.0		.....		41	39	508	Central Ohio	5,579,508	922,670	106,133	1,628,356	3,673,000	1,126,458	6,810,432	141.0		597,633	71,356		
31 Mar. '59	60.3		.....		22	28	432	Cinc., Hamilton and Dayton	2,648,266	504,892	26,500	2,155,800	1,411,000	32,618	3,650,710	60.3		489,437	249,666	7	59
.. .. '59	37.0		.....	62.1				Cinc. and Indianapolis Junc.								37.0					49
1 May, '59	131.8		.....	31.0	16	10	332	Cinc., Wilmington and Zanesv.	6,250,841	*		2,441,176	3,032,000	228,973		131.8	304,168	190,745	19,180		
31 Dec. '58	135.4	5.8	.....		42	31	439	Cleveland, Columbus and Cinc.	4,087,571	684,955	67,422	4,746,100	38,000	8,242	5,343,275	141.2		1,113,639	575,159	7	94½
31 Dec. '58	67.0		.....	18.0				Cleveland and Mahoning	1,920,953	*		580,000	1,202,300	161,200	1,943,500	67.0		237,106	142,855		
31 Dec. '59	95.4	1.2	37.9		31	39	453	Clev., Painesville & Ashtabula	3,431,732	555,343	541,503	3,000,000	1,697,000	35,500	4,812,201	96.6	402,935	1,111,353	646,057	15	110
30 Nov. '58	101.0	102.5	.....		42	...	....	Cleveland and Pittsburg	9,320,288	*		3,942,368	4,918,325	653,821	9,661,102	203.5	646,413	772,093	332,093	4	6½
30 Apr. '59	109.2	79.4	.....		32	52	430	Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,605	7,858,918	188.6		798,155	414,456	6	19½
31 Dec. '58	61.4		.....	53.0	5	6	99	Clev., Zanesville and Cincin.	1,574,693	*		369,673	575,250	632,486		61.5	75,120	68,128	19,763		
31 Dec. '58	72.0		.....	31.0	6	9	103	Columbus and Indianapolis	2,555,000	*		750,000	1,600,000	205,000		72.0	144,000	84,000	17,760		
30 Nov. '58	54.5		10.4					Columbus and Xenia	1,376,250	392,909	112,734	1,490,000	290,700	50,500	1,965,539	ope	r. w. Lit.	Miami.	170,795	8	80
31 Dec. '58	72.0		.....	72.0				Dayton and Michigan	3,746,000	*		1,620,000	2,126,000			72.0	144,606	124,559	66,779		
31 Aug. '58	36.6		.....		5	3	87	Dayton and Western	930,262	104,912		289,692	700,000	90,482	1,080,174	36.6		125,940	66,253		
31 Aug. '58	16.0		.....	47.0	3	2	21	Dayton, Xenia and Belpre	860,496	*		437,838	422,658			16.0	40,064	64,000	33,000		
31 Dec. '58	45.0		.....		6	5	72	Eaton and Hamilton	1,101,744	79,022	62,630	469,762	728,853	152,694	1,358,867	45.0	105,304	151,866	44,615		
.. .. '59	36.0		.....	84.0				Fremont and Indiana													
31 Aug. '58	32.0		.....		6	5	68	Greenville and Miami	888,000	*		300,000	473,000	75,000		47.0	60,901	63,141	13,573		
30 Nov. '58	13.0		.....	34.0	1	2	50	Iron	172,830	*		118,865	50,000	3,965		13.0	'24,000	31,126	10,460		
30 Nov. '58	83.5		37.8		39	32	602	Little Miami	3,451,179	785,817	438,857	2,981,293	1,399,000	34,196	4,709,137	138.0	637,835	1,200,499	341,591	8	83
31 Dec. '58	173.8	21.6	.....		33	26	623	Marietta and Cincinnati	9,517,551	1,115,662	574,000	3,477,705	7,405,917	1,754,220	13,202,262	195.4	556,732	374,198	45,452		
30 Apr. '59	192.3		.....		48	34	628	Ohio and Mississippi	18,635,688	*	*	6,584,681	9,880,000	2,330,030	18,794,721	192.3		881,957	312,441		
31 Aug. '58	117.0	8.0	.....		17	16	238	Pittsburg, Columbus and Cin.	4,772,951	*		1,906,736	2,400,000	466,215		125.0					
30 Jun. '59	153.9	52.0	.....		39	27	365	Sandusky, Dayton and Cinc.	3,988,154	605,900	197,967	2,697,090	2,134,000	439,261	5,508,357	205.9		577,958	211,894		
30 Dec. '58	116.0	9.0	.....		18	20	206	Sandusky, Mansfield & New'k	2,141,811	*		828,583	1,402,572	132,301	2,363,456	125.0	155,006	209,918	51,371		
30 Nov. '58	55.6		.....	74.0	7	3	64	Scioto and Hocking Valleys	1,103,975	*		403,975	500,000	100,000		55.6	70,000	110,200	53,100		
31 Aug. '58	19.5		.....	23.5				Springfield and Columbus	346,500			193,000	150,000	3,500	346,500	ope	r. by C.,	C. & C.			
30 Nov. '58	49.8		.....	62.2	5	6	62	Springfield, Mt. Vern. & Pittsb.	2,205,000	*		1,000,000	1,050,000	200,000	2,250,000	49.8	222,000				
.. .. '58	243.0		.....		35	18	580	Toledo, Wabash and Western	10,542,000	*		3,573,000	7,650,000		11,223,000	250.0		676,022	159,769		
								PENNSYLVANIA.													
.. .. '58	44.0		.....	136.2				Alleghany Valley	1,988,617	*		1,661,050	55,000	273,567	1,988,617	44.0		85,000	45,000		
.. .. '58	21.3	29.0	.....					Beaver Meadow	1,542,950	*		1,650,000	2,000			50.3				10	
31 Aug. '59	63.5		.....					Catawissa, Williamsp't & Erie	3,518,785	364,571		1,700,000	2,271,536	436,228	4,407,764	119.0		337,257	90,438		
30 Sep. '59	52.5		.....		11	...	....	Cumberland Valley	1,225,971	*		981,900	245,500	55,643	1,299,194	52.5	142,944	169,125	94,311	6	
.. .. '58	54.0		.....					Dauphin and Susquehanna								54.0					
31 Dec. '59	110.8	2.3	.....		71	17	3,366	Del., Lackawanna and West'n	8,831,707	*	505,000	3,360,872	6,070,125	569,190	11,064,413	202.0		1,430,512	881,609		53
.. .. '59	36.5		.....					East Pennsylvania								36.3					
.. .. '58	19.6		.....					Erie and Northeast	750,000	*		600,000	100,000		750,000	ope	r. b.Buf.	& S. L.		10	
31 Aug. '58	36.9	19.0	.....					Harrisburg and Lancaster	1,881,697	*		1,056,450	459,872		1,881,697	55.9		423,561	166,852	8	54
31 Dec. '58	35.0		.....	41.3				Hempfield	1,388,168	*						35.0					
.. .. '58	30.5	10.3	.....					Huntingdon and Broad Top	1,181,997	*						40.8					
30 Sep. '57	68.0		.....					Lackawanna and Bloomsburg								68.0					
30 Nov. '58	45.7		.....	20.2	15	6	882	Lehigh Valley	3,276,523	*		1,788,000	1,500,000	800,000		45.7		441,187	268,724	6	25
30 Nov. '58	28.0	10.0	.....					Little Schuylkill	3,407,651	*		2,606,100	546,222			38.0		353,101	255,930	9	
.. .. ..	8.0	21.0	.....					Mauch Chunk and Summit H.													
.. .. ..	13.0	74.0	.....					Mine Hill and Schuylk. Haven													
30 Nov. '58	55.6	10.1	.....		16	14	513	North Pennsylvania	4,987,321	353,516		3,086,710	2,714,500	391,606	6,197,816	65.7		296,894	162,071		86½
31 Dec. '58	330.0	56.0	300.0		299	99	2,345	Pennsylvania	21,853,949	2,828,529	2,316,060	13,240,225	16,094,451	798,213	30,168,987	386.0		5,185,330	2,163,445	6	74
31 Dec. '58	19.7		.....	58.3				Phila. and Baltimore Central	313,061	*		178,787	101,100	45,681	313,061						
30 Sep. '59	17.0	7.0	.....		16			Phila., Germant'n & Norrist'n	1,422,977	228,555		1,208,500	374,800	104,720	1,742,333	24.0		288,657	157,194	10	
30 Nov. '58	147.4	4.0	.....		142	58	5,688	Philadelphia and Reading	19,390,868	2,121,019	20,180	11,787,041	12,195,950	111,814	24,044,305	197.4		2,510,751	1,310,952	3½	37½
.. .. '58	33.0		.....					Philadelphia and Sunbury	1,348,812	*		600,000	1,200,000			53.0		89,535	53,335		

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil." Running *dots* (.....) signify "not ascertained." Land-Grant Railroads are in "*italics*."

Years ending.	Railroad. Main Line.	Railroad. Lateral and Branch Lines.	Railroad. 2nd Track and Sidelings.	Road in progress or projected	Equipment. Engines.	Equipment. Cars. Passenger.	Equipment. Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Property and Assets. Rolling Stock.	Property and Assets. Invested in foreign works.	Liabilities. Share Capital paid in.	Liabilities. Bonded and Mortgage Debt.	Liabilities. Floating Debt.	Liabilities. Balance Total, Incl. all other assets and liabilities.	Road operated, Incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Earnings. Net.	Dividends.	Price of shares.
	M.	M.	M.	M.	No	No	No.		$	$	$	$	$	$	$	M.	M.	$	$	p. c.	p. c.
								PENNSYLVANIA, (*Continued.*)													
31 Dec. '58	28.0	—	.....	—	...	...	—	Philadelphia and Trenton	1,000,000			1,000,000			1,000,000	28.0	oper. oy	Cam. & Amboy		7	.....
30 Nov. '58	98.0	6.0	.....	—	31	60	487	Phila., Wilmington and Balt.	7,235,522	762,225	76,081	5,600,000	2,547,379	198,961	8,782,996	194.0	.....	1,095,847	344,152	5	.....
31 Oct. '57	48.0	—	.....	80.0	...	...	...	Pittsburg and Connellsville	2,285,606	*		1,031,173	1,100,000	513,403	2,644,756	48.0	.....	57,838	4,740	—	.....
.. .. '59	10.3	—	.....	127.5	...	...	...	Pittsburg and Erie	.....			.....	.....	.....	.....	10.3	.....	.....	.....		.....
31 Dec. '58	467.0	—	.....	—	94	96	1,130	Pittsb'g, Ft. Wayne & Chicago	14,631,110	*	91,100	6,260,555	9,029,765	1,657,594	17,046,252	467.0	1,394,029	1,567,232	601,658	—	.....
30 Sep. '57	31.0	—	.....	11.0	...	...	...	Pittsburg and Steubenville	1,947,462	*		1,221,277	280,000	.....	.....	.....	.....	.....	.....	—	.....
.. ..	25.0	—	.....	—	...	...	...	Schuylkill Valley	.....	.....	.....	.....	.....	.....	.....	25.0	.....	.....	.....	—	.....
1 Jan. '59	40.2	—	.....	230.9	...	...	...	Sunbury and Erie	5,517,841	37,933		3,903,843	527,000	309,591	8,876,132	40.3	.....	.....	.....	—	.....
.. .. '58	29.7	—	.....	—	...	...	...	Tioga	1,093,263	*		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
31 Mar. '59	78.0	—	.....	—	...	...	...	Williamsport and Elmira	3,650,682	380,847		1,500,000	2,361,973	161,272	4,148,920	.....	.....	191,970	96,308	—	1
								RHODE ISLAND.													
31 Aug. '58	50.0	—	2.0	—	9	13	84	N. Y., Providence and Boston	2,158,000	*		1,508,000	306,500	.....	2,158,000	50.0	147,231	208,439	96,571	5	.....
30 Nov. '58	13.6	—	0.5	—	—	3	5	Providence, Warren & Bristol	434,698	1,588		287,917	109,937	36,139	.....	13.6	23,514	23,005	1,278	—	.....
								SOUTH CAROLINA.													.....
31 Dec. '58	13.2	1.5	.....	182.4	2	—	26	Blue Ridge	2,126,539			1,916,515	217,577	.....	2,134,092	13.2	.....	.....	.....	—	.....
31 Dec. '58	54.9	—	.....	47.4	4	3	21	Charleston and Savannah	801,615	34,372	250,000	706,365	195,266	197,905	1,099,536	51.9	.....	.....	.....	—	.....
31 Dec. '58	109.6	—	.....	—	13	9	176	Charlotte and South Carolina	1,719,045	*		1,201,000	384,000	.....	.....	109.6	.....	283,263	151,536	6	.....
.. .. '58	40.3	—	.....	—	...	...	...	Cheraw and Darlington	600,000	*		400,000	200,000	.....	.....	49.3	.....	.....	.....	—	.....
1 Jan. '59	143.2	21.3	.....	—	...	...	...	Greenville and Columbia	2,439,769	324,161		1,429,008	1,145,000	345,546	2,919,554	164.5	.....	341,190	125,871	—	.....
31 Aug. '58	22.5	—	.....	—	...	...	...	Kings Mountain	196,230	*		200,000	.....	.....	200,000	22.5	.....	.....	.....	5	.....
31 July '58	32.0	—	.....	—	...	...	...	Laurens	543,403	*		400,000	106,218	.....	575,729	32.0	.....	27,563	8,527	—	.....
28 Feb. '59	102.0	—	.....	—	...	...	...	North-Eastern	2,011,652	*		985,743	960,410	108,172	2,057,325	102.0	.....	220,014	96,145	—	.....
31 Dec. '58	136.0	106.0	.....	—	62	59	790	South Carolina	5,517,384	1,103,130	374,060	4,179,475	2,770,463	193,086	7,701,337	242.0	.....	1,501,008	820,511	7	.....
31 July '58	25.1	—	.....	41.9	...	...	...	Spartanburg and Union	.....	.....	.....	.....	.....	.....	.....	25.1	.....	.....	.....	—	.....
								TENNESSEE.													
.. .. '58	30.0	—	.....	—	—	—	—	Cleveland and Chattanooga	867,210			.....	.....	.....	.....	—	.....	.....	.....	—	.....
.. .. '58	46.7	—	.....	—	—	—	—	Edgefield and Kentucky	.....	.....	.....	.....	.....	.....	.....	—	.....	.....	.....	—	.....
30 Jun. '58	110.8	—	.....	—	...	...	...	East Tennessee and Georgia	3,376,943	*		1,289,155	1,910,688	278,319	3,501,197	110.8	.....	264,959	156,195	—	.....
30 Jun. '58	130.3	—	.....	—	10	13	95	East Tennessee and Virginia	2,529,418	117,512		629,800	1,968,950	406,659	3,041,940	130.3	.....	191,198	95,231	—	.....
30 Jun. '58	271.0	28.0	.....	—	...	...	...	Memphis and Charleston	5,276,573	699,776	109,066	2,258,115	2,594,000	837,992	6,354,752	299.0	.....	1,330,812	778,036	—	.....
.. .. '59	82.0	—	.....	48.3	...	...	...	Memphis and Ohio	3,200,000	*		.....	.....	.....	.....	82.0	.....	.....	.....	—	.....
30 Jun. '59	—	—	.....	73.0	—	—	—	Memphis, Clarkesv. & Louisv.	195,364			.....	.....	.....	.....	—	.....	.....	.....	—	.....
30 Apr. '59	48.1	—	.....	24.8	4	3	48	Mississippi Central and Tenn.	1,023,470	*		309,562	624,500	118,659	1,052,721	48.1	.....	.....	43,436	—	.....
30 Nov. '58	34.2	—	.....	—	2	3	21	McMinnville and Manchester	565,459	*		140,097	406,000	.....	565,459	34.2	run by	Nash. &	Chatta.	—	.....
30 Nov. '58	151.0	8.0	.....	—	38	20	323	Nashville and Chattanooga	3,733,472	*	160,000	2,262,405	1,674,000	85,944	4,121,557	193.2	.....	641,552	279,267	3	.....
.. .. '58	—	—	.....	172.8	—	—	—	Nashville and Northwestern	1,000,000			.....	.....	.....	.....	—	.....	.....	.....	—	.....
30 Jun. '58	43.6	—	.....	68.3	—	—	—	Tennessee and Alabama	935,697	*		309,754	626,889	83,037	.....	43.6	.....	55,775	29,405	—	.....
.. .. '59	15.0	—	.....	9.5	—	—	—	Winchester and Alabama	.....	.....	.....	.....	.....	.....	operated	by	Nash. &	Chatt.		—	.....
								TEXAS, (*all aided by State*).													
.. .. '58	32.0	—	.....	158.0	...	...	...	Buffalo Bayou, Braz.& Col'r'do	.....	.....	.....	.....	.....	.....	.....	32.0	.....	.....	.....	—	.....
.. .. '58	56.0	—	.....	184.0	...	...	...	Galvest., Houst. & Henderson	.....	.....	.....	.....	.....	.....	.....	56.0	.....	.....	.....	—	.....
.. .. '59	43.0	—	.....	31.0	...	...	...	Houston and Brazoria	.....	.....	.....	.....	.....	.....	.....	43.0	.....	.....	.....	—	.....
1 May '58	75.0	—	.....	281.0	2	3	67	Houston and Texas Central	1,132,747	*		1,270,123	335,000	128,205	1,691,443	35.0	.....	76,958	.....	—	.....
.. .. '59	25.0	—	.....	110.0	...	...	...	San Antonio & Mexican Gulf	.....	.....	.....	.....	.....	.....	.....	25.0	.....	.....	.....	—	.....
.. .. '59	28.0	—	.....	756.0	...	...	...	Southern Pacific	.....	.....	.....	.....	.....	.....	.....	28.0	.....	.....	.....	—	.....
								VERMONT.													
31 May, '59	90.7	—	8.6	19.6	7	8	181	Connect. & Passumpsic Rivers	2,345,724	185,421		1,200,000	800,000	.....	.....	90.7	98,856	192,122	82,001	—	.....
31 Aug. '59	119.6	—	13.0	—	26	18	555	Rutland and Burlington	3,989,708	601,509	92,859	2,233,376	3,145,001	1,013,764	6,392,141	119.6	395,762	354,288	81,561	—	.....
31 Aug. '59	62.0	—	3.4	—	10	5	201	Rutland and Washington	1,771,683	*		950,000	.....	.....	1,780,683	62.0	175,830	172,826	37,124	—	.....
30 Jun. '59	119.0	—	20.0	—	42	28	885	Vermont Central	8,402,055	*		5,000,000	3,853,000	1,423,299	10,276,299	166.0	617,262	702,271	115,678	—	.....
30 Jun. '59	47.0	—	2.8	—	—	—	—	Vermont and Canada	1,350,695			1,350,000	.....	.....	1,380,695	ope	r. by Vt.	Central	.....	—	55
31 Aug. '59	23.7	—	0.7	—	4	4	54	Vermont Valley	1,212,274	89,612		516,164	793,200	.....	1,308,864	23.7	47,324	43,998	10,498	—	.....
31 Aug. '59	54.0	10.5	.....	—	—	—	—	Western Vermont	1,083,500	*		332,000	700,000	.....	1,083,500	ope	r.b.Troy	& Bost.	55,859	—	.....
								VIRGINIA.													
31 Aug. '59	41.3	—	.....	122.1	...	...	...	Alex., Loudoun & Hampshire	1,492,194	42,000		1,403,018	36,188	88,131	1,534,194	.....	.....	.....	.....	—	.....
30 Sep. '58	75.8	—	.....	63.5	9	8	216	Manassas Gap	3,262,990	209,901		3,038,500	418,000	292,956	3,939,729	75.8	.....	125,599	65,554	—	.....
31 Mar. '59	79 .2	—	.....	—	...	...	...	Norfolk and Petersburg	2,106,066	*	10,500	1,511,000	489,110	209,923	2,222,168	79.2	.....	.....	.....	—	.....
30 Sep. '59	103.5	—	.....	—	8	—	—	Northwestern Virginia	5,322,150	*		468,605	5,719,229	.....	.....	103.5	345,427	248,004	loss	—	.....
30 Sep. '58	112.5	9.1	4.5	36.0	12	10	101	Orange and Alexandria	4,339,375	*		1,899,329	1,480,500	371,590	5,134,475	97.6	150,538	258,875	151,872	—	.....
30 Sep. '59	123.3	10.1	.....	—	19	13	279	Petersburg and Lynchburg	3,040,636	374,996		1,365,300	1,851,500	292,842	4,745,256	133.4	.....	410,166	201,344	—	.....
31 Dec. '58	59.2	21.3	.....	—	14	17	131	Petersburg and Roanoke	988,791	192,940		883,200	127,427	34,344	1,313,057	80.5	.....	310,988	186,085	5	.....
30 Sep. '58	140.5	1.8	.....	—	23	18	370	Richmond and Danville	3,588,653	*		1,981,017	1,126,407	25,153	4,424,671	142.3	263,893	491,674	267,192	—	65
31 Mar. '58	75.1	—	.....	—	...	...	...	Richm., Frederick & Potomac	1,985,579	*	52,800	1,033,600	680,115	116,550	2,183,232	75.1	.....	289,126	145,856	7	70
30 Apr. '59	22.2	2.7	.....	—	10	16	192	Richmond and Petersburg	1,087,949	*		836,100	201,408	34,681	1,250,186	24.9	79,921	157,542	82,485	6	64
30 Sep. '59	38.3	—	.....	14.3	2	1	13	Richmond and York River	488,190	22,810		657,812	85,000	.....	742,812	24.0	.....	.....	.....	—	.....
31 Aug. '58	80.0	—	.....	—	10	11	169	Seaboard and Roanoke	1,360,988	*	33,700	644,000	473,940	59,776	1,449,037	80.0	.....	240,817	105,728	—	.....
30 Sep. '59	178.0	17.0	.....	10.0	27	20	280	Virginia Central	4,835,729	527,181		3,132,445	1,485,346	43,605	8,816,522	195.0	304,195	652,405	382,696	4½	50
31 Aug. '59	204.2	10.7	.....	—	36	12	385	Virginia and Tennessee	5,571,716	771,086		3,353,672	3,247,500	671,218	7,272,580	214.9	387,413	672,894	278,759	—	.....
30 Sep. '57	32.3	—	.....	—	—	—	—	Winchester and Potomac	573,998	*		300,000	120,000	18,592	573,998	32.3	.....	69,009	10,815	—	.....
								WISCONSIN.													
.. .. '59	55.0	—	.....	16.0	...	...	...	Kenosha and Rockford	.....	.....	.....	.....	.....	.....	.....	28.0	.....	.....	.....	—	.....
25 Mar. '59	199.8	—	.....	—	...	...	...	*Milwaukee and Minnesota*	.....	.....	.....	10,872,000	10,414,066	996,587	22,282,653	199.8	.....	492,454	.....	—	.....
31 Dec. '58	40.0	—	.....	—	5	10	75	Milwaukee and Chicago	1,830,073	*	23,304	1,000,000	600,000	246,365	1,908,555	40.0	74,243	159,456	82,182	—	.....
.. .. '57	42.0	—	.....	27.8	...	...	...	Milwaukee and Horicon	919,757	*		1,101,200	.....	.....	.....	42.0	10 mos.	60,066	.....	—	.....
31 Dec. '58	191.9	42.5	28.3	—	43	33	633	*Milwaukee and Mississippi*	7,108,026	1,006,100		3,696,693	4,047,000	762,852	8,506,545	234.4	.....	883,186	439,943	—	1½
.. .. '57	50.0	—	.....	85.0	...	...	...	Milw., Watertown & Baraboo	514,238	.....		345,861	132,000	.....	.....	50.0	.....	121,401	.....	—	.....
1 Jan. '58	104.0	—	.....	38.8	...	...	...	Racine and Mississippi	3,802,016	*		2,705,720	1,417,000	1,085,328	5,692,471	86.0	.....	213,964	31,045	—	.....
.. .. '58	10.0	—	.....	55.0	...	...	...	Wisconsin Central	600,000	.....		.....	.....	.....	operated	by	Fox Riv	er Vall.	.....	—	.....
								FOREIGN COMPANIES.													
								CANADA.													
31 July '59	158.5	—	.....	—	26	24	341	Buffalo and Lake Huron	2,884,887	740,870		3,715,762	187,266	107,067	4,010,195	158.5	363,213	.....	.....	—	.....
.. .. '59	81.0	—	.....	—	16	17	214	Montreal and Champlain	.....	.....	.....	.....	.....	.....	.....	81.0	166,245	.....	.....	—	.....
.. .. '59	37.0	11.0	.....	72.0	2	2	17	Brockville and Ottawa	.....	.....	.....	.....	.....	.....	.....	48.0	.....	.....	.....	—	12
30 Sep. '58	624.0	137.0	.....	78.0	204	130	2,399	Grand Trunk	46,651,084	*		15,603,128	31,351,133	.....	46,954,261	761.0	2,049,997	1,069,219	4,000	6	38
.. .. '59	229.0	128.0	.....	—	87	126	1,689	Great Western	22,153,321	*		14,054,908	8,480,849	.....	.....	357.0	1,360,900	.....	.....	3	.....
.. .. '59	24.0	—	.....	—	2	2	52	London and Port Stanley	.....	.....	.....	.....	.....	.....	.....	24.0	37,081	.....	.....	—	.....
.. .. '59	95.0	1.6	.....	—	17	20	337	Northern (O. S. & H.)	.....	.....	.....	.....	.....	.....	.....	96.6	254,530	.....	.....	—	.....
.. .. '59	54.0	—	.....	—	5	8	118	Ottawa and Prescott	.....	.....	.....	.....	.....	.....	.....	54.0	89,222	.....	.....	—	.....
.. .. '59	25.0	—	.....	—	4	—	57	Welland	.....	.....	.....	.....	.....	.....	.....	25.0	.....	.....	.....	—	.....
								NEW BRUNSWICK.													
30 Nov. '58	29.9	0.9	.....	79.3	...	...	...	European & North American	2,100,356	*		.....	.....	.....	.....	29.9	.....	.....	.....	—	.....
.. .. '59	60.0	—	.....	.....	...	...	...	New Brunswick and Canada	988,746	*		868,493	.....	70,253	988,746	60.0	.....	.....	.....	—	.....
								NOVA SCOTIA.													
.. .. '59	61.5	—	.....	60.1	...	...	...	Nova Scotia	.....	.....	.....	.....	.....	.....	.....	61.5	.....	.....	.....	—	.....
								NEW GRANADA.													
31 Dec. '58	48.7	—	.....	—	...	...	...	Panama	8,000,000	*	—	4,973,000	2,427,000	—	8,000,000	48.7	.....	1,925,444	1,360,160	12	127½

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F." Sinking Fund. "var.," that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.
Alabama and Florida:				
Mortgage	$300,000	7	1867	----
Convert. (guar. by Dir.)	150,000	7	1863	----
Land Mortgage	23,500	7	1869	----
Alabama and Miss. Rivers:				
State (Ala.) Loan	123,171	---	------	----
Mortgage	109,500	---	------	----
Alabama and Tenn. Rivers:				
1st Mortgage convertible	526,000	7	1872	----
2d Mortgage	225,705	8	1864	----
Albany, Vt. and Canada:				
1st Mortgage	500,000	7	1867	----
Albany and West Stockbridge:				
Albany City (S. F.)	1,000,000	6	'66-'76	----
Androscoggin and Kennebec:				
1st Mortgage (Coupon) '60-'64	1,000,000	6	'62-'64	----
Stock, convert. (Coupon)	710,000	6	'63-'66	----
Atlantic and St. Lawrence:				
Dollar Bonds (Coupon)	988,000	6	1866	----
Sterling Bonds (Coupon)	484,000	6	1878	----
City of Portland Loan (Coup.)	1,500,000	6	'68-'70	----
Baltimore and Ohio:				
Maryland Sterling	3,000,000	5	------	----
Mortgage Coupon	2,500,000	6	1885	82½
" "	700,000	6	1880	84
" "	1,128,500	6	1875	83
" "	1,000,000	6	1867	----
Balt. City Loan	5,000,000	6	------	----
Bellefontaine and Indiana:				
1st Mortgage convertible	791,000	7	1866	----
2d Mortgage	140,000	7	1870	----
Real Estate (1861, '63, '68)	129,000	7	var.	----
Income (S. F.)	199,500	7	1859	----
Belvidere Delaware:				
1st Mort. (guar. C. and A.)	1,000,000	6	1877	----
2d Mortgage	445,500	6	------	----
Camd. and Amb. R.R. Co.	244,000	6	------	----
Black River and Utica:				
1st Mortgage	370,000	7	1869	----
Boston, Concord and Montreal:				
1st Mortgage	200,000	6	1870	----
2d Mortgage	300,000	7	1870	----
3d Mortgage Coupons	150,000	6	------	----
4th Mortgage Coupons	200,000	7	------	----
Sinking Fund	200,000	6	------	----
Boston and Lowell:				
Mortgage	440,000	6	1873	----
Boston and Worcester:				
Mortgage (plain)	100,000	6	1860	----
Mortgage (convertible)	500,000	6	1860	----
Buffalo and State Line:				
1st Mortgage	500,000	7	1866	99
Income (⅞ in '59, ½ in '62)	200,000	7	var.	----
Unsecured	200,000	7	1864	----
Erie and North-East	149,000	7	------	----
Burlington and Missouri:				
1st Mort. on 1st Division	590,000	---	------	----
Burlington Loan	75,000	---	------	----
Cairo and Fulton (Mo.):				
State (Mo.) Loan	650,000	6	'78-'79	----
Camden and Amboy:				
Mortgage	367,000	6	1864	----
Mort. (chgd from Sterl'g)	888,000	5	1864	----
Mortgage	800,000	6	1849	----
Mortgage	1,700,000	6	1875	----
Sterling (£210,000)	1,008,000	5	1864	----
Sterling (£225,000)	1,080,000	6	1864	----
New Loan (iss'd $337,000)	2,500,000	6	1887	----
Unsecured	800,000	6	1863	----
***Catawissa, Williamsp. and Erie:**				
1st Mortgage	1,500,000	7	1865	32
2d Mortgage	399,036	7	1886	----
Chattel Mortgage	380,000	10	1871	----
Cayuga and Susquehanna:				
1st Mortgage	300,000	7	1865	----
Unsecured	89,000	7	1862	----
Central of Georgia:				
Mortgage	106,267	7	1863	----
Central of New Jersey:				
1st Mortgage	1,500,000	7	var.	----
2d Mortgage	1,500,000	7	1875	----
Income	375,000	7	var.	----
***Central Ohio:**				
1st Mortgage	450,000	7	1861	----
1st Mortgage	800,000	7	1864	----
2d Mortgage	800,000	7	1865	----
3d Mortgage (S. F.)	950,000	7	1885	----
4th Mortgage (S. F.)	1,365,800	7	1876	----
Income (1858, '59 and '60)	1,172,200	7	var.	----
Income (iss. to Muskingum Co.	100,000	7	1862	----
Charleston and Savannah:				
1st Mortgage (endorsed)	510,000	6	------	----
2d Mortgage	1,000,000	7	------	----
Cheshire:				
Mort. (1860, '63, '75 and '77)	786,400	7	var.	----
Chicago, Burlington & Quincy:				
Consolidated 1st Mort.	1,660,000	8	1883	----
Chic. and Aur. 1st Mort.	405,000	7	1867	----
Ch. and Aur. 2d M. (S.F.)	303,000	7	1869	----
Cent. Mil. Tr. 1st Mort.	400,000	7	1864	----
Cent. M. T. 2d M. (Conv.)	281,000	8	1868	----
Chicago, Alton and St. Louis:				
1st Mortgage	------	†	------	----
2d Mortgage	------	†	------	----
3d Mortgage	------	†	------	----

Description.	Amount.	Interest.	Due.	Price.
Chicago and Milwaukee:				
1st Mortgage (convertible)	$512,000	---	------	----
Income	62,000	---	------	----
Real Estate 2d Mortgage	188,864	---	1868	----
Chicago and Rock Island:				
1st Mortgage	1,397,000	7	1870	90
Chic., St. Paul and Fond du Lac:				
1st Mortgage (on 1st Division)	3,000,000	†7	------	----
2d Mortgage (1st Land Grant)	3,000,000	†8	------	----
Real Estate	350,000	†8	------	----
Cincinn., Hamilton and Dayton:				
1st Mortgage	461,000	---	1867	92
2d Mortgage	950,000	---	1880	82
***Cincinn., Wilm. and Zanesville:**				
1st Mortgage	1,300,000	---	------	----
2d Mortgage	574,000	---	------	----
3d Mortgage	158,000	---	------	----
Income	250,500	---	------	----
Tunnel Right	1,000,000	---	------	----
Cleveland and Mahoning:				
1st Mortgage	694,500	---	------	----
2d Mortgage	469,000	---	------	----
3d Mortgage	38,800	---	------	----
Clev., Painesville and Ashtabula:				
1st Mortgage	564,000	7	1861	98
2d Mortgage	303,000	7	1862	----
Special (Sunbury and Erie)	500,000	7	1874	----
Convertible Scrip	300,000	7	1880	----
Cleveland and Pittsburg:				
1st Mortgage (Main Line)	800,000	7	1860	65
2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873	60
3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875	----
4th Mort. (M.L.) or 3d Extension	1,154,000	---	------	----
Income	118,000	---	------	----
Dividend Bonds and Scrip	491,825	---	------	----
Cleveland and Toledo:				
Junction 1st Mortgage 1st Div.	377,000	7	1867	----
Junction 1st Mortgage 2d Div.	305,000	7	1872	----
Junction 2d Mortgage	324,000	7	1862	----
Tol., Nor. and Clev. 1st Mort.	522,000	7	1863	70
Tol., Nor. and Clev. 2d Mort.	299,600	7	1863	----
Junction Income	61,500	7	1862	----
C. and T. Income	192,950	7	1863	----
C. and T. Income (convertible)	409,900	7	1864	----
C. and T. Income (convertible)	373,000	7	1864	----
C. and T. Dividend (convert.)	199,735	7	1865	----
C. and T. Income (convertible)	129,000	7	1870	----
C. and T. (S. F.) Mortgage	640,000	7	1885	----
Junction (Lloyd's)	5,000	7	1862	----
***Cleveland, Zanesville and Cin.:**				
------	------	---	------	----
***Columbus, Piqua and Indiana:**				
------	------	---	------	----
------	------	---	------	----
Columbus and Xenia:				
1st Mortgage	18,000	---	1859	----
Dividend (due 1860, '61, '62, '66)	272,700	---	var.	----
Connecticut River:				
Mortgage (due 1859, 60, '62, '63)	210,000	6	var.	----
Connectic't and Passump. Rivers:				
1st Mortgage	800,000	---	------	----
Cumberland Valley:				
1st Mortgage	116,500	---	------	----
2d Mortgage	97,000	---	------	----
Dauphin and Susquehanna:				
------	------	†	------	----
------	------	†	------	----
Dayton and Michigan:				
------	------	---	------	----
------	------	---	------	----
Dayton and Western:				
1st Mortgage	300,000	---	------	----
2d Mortgage	------	---	------	----
Delaware:				
1st Mortgage	500,000	---	------	----
Guarantied	65,000	---	------	----
State Loan	170,000	---	------	----
Delaware, Lackawanna and W'n:				
1st Mortgage	900,000	---	1871	----
1st Mortgage (E. Extension)	1,500,000	---	1875	89
2d Mortgage	2,600,000	---	1881	----
Income (due 1862, '65 and '67)	1,263,170	---	var.	----
Detroit and Milwaukee:				
1st Mortgage (convertible)	2,500,000	7	1875	----
2d Mortgage	1,000,000	8	1866	----
3d Mortgage (convertible)	750,000	10	1863	----
4th Mortgage (G. W. R. R.)	500,000	8	------	----
Dubuque and Pacific:				
New Construction	800,000	†	------	----
Dubuque Western:				
1st Mortgage	344,000	†	------	----
Eastern (Mass.):				
Income (due $75,000 annually)	525,000	6	var.	----
2d Mortgage (convertible)	710,000	5	1862	----
3d Mortgage (convertible)	445,000	6	1874	----
1st M. (State) $75,000 a y'r after '65	500,000	5	var.	----
East Tennessee and Georgia:				
State, 1st Mortgage	970,000	---	------	----
Endorsed by State of Tennessee	150,000	---	------	----
Mortgage (ordinary)	790,688	---	------	----
East Tennessee and Virginia:				
State, 1st Lien	1,602,000	---	------	----
Endorsed by State of Tennes.	200,000	---	------	----
1st Mortgage (after State)	100,000	---	------	----
Redeemable in Stock	66,950	---	------	----

Description.	Amount.	Interest.	Due.	Price.
Eaton and Hamilton:				
1st Mortgage	$757,734	†	var.	----
Erie and North-East:				
Exchanged for Buff. and St. L.	149,000	---	------	----
Evansville and Crawfordsville:				
------	------	---	------	----
------	------	---	------	----
Florida:—				
Internal Improvement (State)	1,655,000	7	1891	----
Free Land, 2d Mortgage	1,500,000	8	1891	----
Florida and Alabama:				
Internal Improvement (State)	------	7	1791	----
Free Land, 2d Mortgage	------	8	1791	----
Florida, Atlantic and Gulf Centr.:				
Internal Improvement (State)	300,000	7	1791	----
Free Land, 2d Mortgage	200,000	8	1791	----
Fox River Valley:				
1st Mortgage	400,000	†	------	----
2d Mortgage	180,000	---	------	----
Galena and Chicago Union:				
Litchfield	52,015	7	1859	----
1st Mortgage (S. F.)	1,993,000	7	'62-'63	93
2d Mortgage (S. F.)	1,738,000	7	1875	83
Galvest'n, Houst. and Henders'n:				
------	------	---	------	----
------	------	---	------	----
***Great Western, Ill.:**				
1st Mortgage (W. Div. 100 m.)	1,000,000	10	------	----
1st M. (E.D. 84 m.), 2d M. (W.D.)	1,350,000	7	------	----
Old Sang. and Morg. Railroad	41,000	---	------	----
2d Mortgage	323,000	---	------	----
Chattel (Equipment) Mortgage	374,426	---	------	----
Greenville and Columbia:				
1st Mortgage, Coupon	1,145,000	---	------	----
------	------	---	------	----
Hannibal and St. Joseph:				
Missouri State Loan (1st Lien)	3,000,000	6	------	----
Land Security	5,000,000	7	------	59½
2d Mortgage (convertible)	757,000	7	------	----
Plain	11,000	7	------	----
Harrisburg and Lancaster:				
New Dollar Bonds	459,872	6	1883	93½
Hartford and New Haven:				
1st Mortgage	1,000,000	6	1873	98
Hartf'd, Providence and Fishkill:				
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------	------	---	------	----
------	------	---	------	----
Houston and Texas Central:				
State (1st Lien) Loan	210,000	---	------	----
Mortgage	125,000	7	1866	----
Hudson River:				
1st Mortgage	4,000,000	7	'69-'70	106
2d Mortgage	1,980,000	7	1860	98
3d Mortgage	1,840,000	7	1875	80
Convertible	1,002,000	7	1877	----
Illinois Central:				
Optional Right Scrip	65,000	7	1863	----
Construction	12,885,000	7	1875	85½
Construction	4,115,000	6	1875	95
Free Land	3,000,000	7	1860	----
Indiana Central:				
1st Mortgage (convertible)	600,000	7	1866	----
2d Mortgage	284,500	10	------	----
Income	281,500	10	------	----
Indianapolis and Cincinnati:				
1st Mortgage	500,000	7	1866	----
2d Mortgage	400,000	7	------	----
Real Estate Mortgage	200,000	7	1858	----
Dividend	86,284	7	------	----
Income and Domestic	176,000	---	var.	----
Indianap., Pittsb. and Cleveland:				
1st Mortgage	656,000	---	------	----
2d Mortgage	167,000	---	------	----
Income	166,000	---	------	----
Domestic	34,200	---	------	----
Jeffersonville:				
1st Mortgage	289,000	---	------	----
2d Mortgage	392,000	---	------	----
***Kennebec and Portland:**				
1st Mortgage (City and Town)	800,000	6	1870	----
2d Mortgage	230,000	6†	1861	----
3d Mortgage	250,000	6†	1862	----
***Kentucky Centr. (Cov. and Lex.):**				
1st Mortgage	160,000	6	------	----
1st Mortgage	260,000	7	------	----
2d Mortgage (convertible)	1,000,000	7	------	----
3d Mortgage	600,000	7	------	----
Guarantied by Covington	200,000	6	------	----
Cincinnati (exchanged)	100,000	6	------	----
Income (issued 1854)	400,000	10	1859	----
Income (issued 1855)	210,000	6	1860	----
Kent'ky Centr. (Lex. and Danv.):				
------	------	---	------	----
------	------	---	------	----
Keokuk, Ft. D. Moines and Minn.:				
City of Keokuk, 20 years	400,000	8†	------	----
City of Keokuk, (special tax)	150,000	10†	------	----
Lee County, 20 years	150,000	8	------	----
Keokuk, Mt. Pleas't and Muscat.:				
Lee County	150,000	8	------	----
City of Keokuk	200,000	8	------	----
Henry and Louisa Company's	50,000	8	------	----
Lehigh Valley:				
1st Mortgage	1,500,000	6	------	----

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:				
1st Mortgage (Eastern Div.)	$903,000	†	------	----
2d Mortgage (Eastern Div.)	1,000,000	†	------	----
1st Land Grant (Western Div.)	4,000,000	†	------	----
2d Land Grant (Western Div.)	353,600	†	------	----
3d Mortgage (whole road)	1,700,000	†	------	----
Farm Mortgage	1,087,700	†	------	----
Unsecured Bonds	1,785,000	†	------	----
Lexington and Frankfort:				
Mortgage, due 1864, '69 and '74	130,000	6	------	----
Little Miami:				
Cincinnati Loan	100,000	---	------	----
1st Mortgage	138,000	6	------	83
2d Mortgage	7,000	6	------	----
3d Mortgage	981,000	6	------	----
Long Island:				
State Loan [S. F.]	100,000	5	1876	----
1st Mortgage	500,000	6	1870	----
Louisville and Frankfort:				
Louisville Loan	174,000	---	------	----
1st Mortgage	248,000	---	------	----
Louisville and Nashville:				
State [Tenn.], 1st Lien	300,000	6	------	----
1st Mortgage	2,000,000	---	------	----
McMinnville and Manchester:				
State [Tenn.]	372,000	6	------	----
Mortgage	24,000	7	------	----
Mortgage	10,000	6	------	----
Madison and Indianapolis:				
State [Ind.] Loan	-------	---	------	----
Mortgage	-------	---	------	----
*Marietta and Cincinnati:				
1st Mortgage [convertible]	2,496,000	7	1868	----
2d Mortgage	2,000,000	---	------	----
3d Mortgage	1,500,000	---	------	----
Sterling Income	333,000	4	------	----
Domestic	928,617	---	'59-'62	----
Memphis and Charleston:				
State [Tenn.] Loan	1,100,000	6	------	----
1st Mortgage	1,600,000	7	1880	----
Memphis, Clarkesv. and Louisv.:				
State [Tenn.] Loan	910,000	6	------	----
Memphis and Ohio:				
State [Tenn.] Loan	1,340,000	6	------	----
Michigan Central:				
1st Mortgage Sterling	467,489	6	------	----
1st Mortgage (convertible)	500,000	8	------	93
Unconvertible	258,000	8	------	----
1st Mortgage (convert.) Dollar	3,831,000	8	------	----
1st Mortgage (S. F.), convertible	3,087,000	8	------	----
Mich. Southern and N'n Indiana:				
Michigan Southern	993,000	†7	1857	----
Northern Indiana	985,000	†7	1861	----
Erie and Kalamazoo	300,000	†	1862	----
Michigan Southern	259,000	†	1863	----
Northern Indiana	299,000	†	1863	----
Jackson Branch	203,000	†	1865	----
Goshen Air Line	1,335,000	†	1868	----
Detroit and Toledo	336,000	†	1876	----
General Mortgage (S. F.)	2,458,000	†	1885	----
2d Mortgage	2,175,000	†	1877	----
*Milwaukee and Beloit:				
1st Mortgage	630,000	8	------	----
Milwaukee and Chicago:				
1st Mortgage	400,000	8	------	----
2d Mortgage	200,000	7	------	----
*Milwaukee and Horicon:				
1st Mortgage	420,000	8	------	----
2d Mortgage	600,000	8	------	----
Farm Mortgage	150,000	10	------	----
Milwaukee and Mississippi:				
1st Mortgage (convertible)	74,000	10†	1861	----
1st Mortgage (convertible)	526,000	8†	1862	----
1st Mortgage (convertible)	650,000	8†	1863	----
1st Mortgage (convertible)	1,250,000	8†	1877	----
South-West Branch	350,000	8†	1866	----
2d Mortgage	600,000	10†	1862	45
Construction	500,000	7†	1859	----
3d Mortgage	500,000	8†	1862	----
Mississippi Central:				
1st Mortgage	1,007,363	7	------	----
Income	91,200	10	------	----
Tennessee State	45,000	6	------	----
Mississippi Central and Tenn.:				
State (Tenn.) Loan	529,000	6	------	----
Income	95,500	---	------	----
Mississippi and Missouri:				
1st Mortgage (convertible)	1,000,000	7	------	----
2d Mortgage (S. F.)	400,000	8	------	----
Oskaloosa Division	1,425,000	7	------	----
Land Grant	7,000,000	7	------	----
Mississippi and Tennessee:				
Tennessee State Loan	98,000	6	1885	----
Mississippi State Loan	202,799	6	------	----
1st Mortgage	171,000	7	1876	----
Mobile and Ohio:				
City (Mobile) Tax Loan	400,000	6	------	----
Tennessee State Loan	674,860	6	------	----
Alabama State Loan	389,410	6	------	----
Income	759,415	8	1861	----
Income	354,723	8	1862	----
Income	375,132	8	1865	----
Income	18,700	8	1867	----
Sterling	878,035	6	1883	----
Mississippi State Loan	200,970	6	------	----
Montgomery and West Point:				
Alabama State Loan	$122,622	---	------	----
Mortgage (due 1860, '63 and '65)	350,000	6	var.	----
Mortgage	450,000	8	1866	----
Muscogee:				
1st Mortgage	249,000	7	------	----
Nashville and Chattanooga:				
Mortgage (State endorsed)	1,500,000	---	------	----
Chat. and Clev. Subsc. (endors.)	150,000	---	------	----
Not endorsed	24,000	---	------	----
*New Albany and Salem:				
Crawfordsville	175,000	7	------	----
1st Mortgage	500,000	10	------	----
1st Mortgage	2,235,000	6	------	----
New Haven and Hartford:				
------ ------	-------	---	------	----
------ ------	-------	---	------	----
N. Hav., N. Lond. and Ston'gton:				
Mortgage	450,000	7	------	----
Mortgage	200,000	6	------	----
Extension	100,000	10	------	----
New Haven and Northampton:				
1st Mortgage	500,000	---	1869	----
New Jersey:				
Company's (various)	711,000	---	var.	----
New London, Willim. and Palmer:				
1st Mortgage	500,000	7†	------	----
2d Mortgage	300,000	6†	------	----
Income (convertible)	152,000	6†	------	----
New London City	100,000	6†	------	----
N. Orl'ns, Jackson and Gt. North.:				
State (Miss.) Loan	155,000	---	------	----
1st Mortgage	3,000,000	8	1886	----
N. Orl'ns, Opelous. and Gt. West.:				
Louisiana State Loan	621,000	---	------	----
New Orleans City Loan	1,500,000	---	------	----
1st Mortgage (S. F.)	2,000,000	8	1889	----
New York Central:				
Albany Loan—Alb. and Sch'dy	127,000	5	1864	102
State Loan—Sch'dy and Troy	100,000	6	1867	----
State Loan—Rochester and Syr.	77,382	5⅓	1861	----
State Loan—Buffalo and Roch.	55,300	5⅓	1865	----
State Loan—Roch., L. and N. F.	298,000	7	1861	----
Stock Subscription	785,000	6	1883	90
Premium Consolidated Stock	8,000,000	6	1883	88
Real Estate	221,000	6	1883	----
New Convertible	3,000,000	7	1864	100
*New York and Erie:				
1st Mortgage	3,000,000	7	1867	92
2d Mortgage	2,000,000	7	1859	89
3d Mortgage (convertible)	6,000,000	7	1871	----
4th Mortgage (convertible)	3,715,000	7	1880	47
5th Mortgage	1,253,500	7	1883	78
Unsecured (convertible)	3,423,000	7	1871	25
Unsecured (convertible)	3,001,000	7	1862	24
Sinking Fund	3,925,500	7	1875	24
New York and Harlem:				
1st Mortgage	3,000,000	7	1873	94
2d Mortgage	1,000,000	7	1864	93
3d Mortgage	1,000,000	7	1867	----
New York and New Haven:				
1st Mortgage	311,000	7	1860	----
1st Mortgage	965,000	6	1866	91½
1st Mortgage	929,000	6	1875	----
N. York, Providence and Boston:				
1st Mortgage	331,000	6	------	----
North Carolina:				
State Loan	2,000,000	6	------	----
State Loan	1,000,000	6	------	----
North-Eastern (S. C.):				
1st Mortgage	700,000	---	------	----
2d Mortgage	224,500	---	------	----
Real Estate	35,910	---	------	----
Northern Central:				
Balt. and Susq. R. R. (Coupons)	150,000	6	1866	----
Md. State Loan (B. and Susq.)	150,000	6	------	----
York and Cumberland 1st Mort.	175,000	6	1870	----
York and Cumberland 2d Mort.	25,000	6	1871	----
York and C. guar. by Baltimore	500,000	6	1877	----
N. C. Contract	292,300	6	1875	----
Construction	1,903,500	6	1885	----
Northern (Ogdensburg):				
1st Mortgage	1,500,000	7†	1859	----
2d Mortgage	3,077,000	7†	1861	----
North Missouri:				
State Loan	2,000,000	6	------	----
State Loan	2,000,000	6	------	----
State Loan	350,000	6	------	----
North Pennsylvania:				
Mortgage	2,500,000	---	------	87
Chattel Mortgage	214,500	10	------	----
Northern (N. H.):				
Mortgage (due 1860, '64 and '74)	219,500	---	var.	----
Norwich and Worcester:				
Mass. State Loan	400,000	6	1877	----
Mortgage	205,800	6	1860	----
Mortgage	16,000	7	1860	----
Dividend Scrip and Bonds	102,339	6	var.	----
Ohio and Mississippi (O. and Ind.):				
1st Mortgage	2,193,500	†	1858	----
2d Mortgage	316,995	†	------	----
Construction	4,637,920	†	1858	----
Income	3,591,185	†	1858	----
Ohio and Mississippi (Ill.):				
---- ----	-------	---	------	----
Orange and Alexandria:				
State Loan	$400,000	---	------	----
1st Mortgage	612,500	6	------	75
2d Mortgage	1,587,500	8	------	----
Pacific (Mo.):				
State (Mo.) Loan	7,000,000	6	------	----
State Loan (S. W. Branch)	2,800,000	6	------	----
Construction	4,500,000	6	------	----
Panama:				
1st Mortgage Sterling	1,250,000	7	1865	99
2d Mortgage Sterling	1,150,000	7	1872	----
Convertible	27,000	7	------	----
Pennsylvania:				
1st Mortgage (convertible)	4,905,000	6	1888	----
2d Mortgage	1,928,000	6	1875	----
2d Mortgage Sterling	1,539,840	6	1875	----
For Canals, etc.	7,400,000	5	------	----
Pennsylvania Coal Company:				
1st Mortgage	600,000	7	------	----
Penobscot and Kennebec:				
Bangor City 1st Mortg. (Coupon)	800,000	6	1874	----
2d Mortgage (Coupon)	250,200	6	1876	----
3d Mortgage (Coupon)	156,600	6	1871	----
Pensacola and Georgia:				
State Internal Improvement	----------	7	35 y's	----
Free Land	----------	---	------	----
Peoria and Oquawka:				
---- ----	----------	†	------	----
Peru and Indianapolis:				
---- ----	----------	†	------	----
Petersburg:				
Mortgage (due 1863 to 1872)	103,000	7	var.	----
Petersb'g and Lynchb'g (S. Side):				
State (Va.) Loan (S. F.)	800,000	7	------	----
1st Mortgage (1850-'70-'75)	365,000	6	var.	----
3d Mortgage (1862-'70-'72)	378,000	6	var.	----
Special Mortgage (1865-'68)	175,000	6	var.	----
Last Mortgage (1861 to 1869)	133,500	8	var.	----
Phila., Germant'n and Norrist'n:				
Consolidated Loan	274,800	---	------	----
Loan of 1842	100,000	---	------	----
Philadelphia and Reading:				
Mortgage	705,000	5	1860	92
Mortgage	1,572,800	6	1860	92
Mortgage (convertible)	886,000	6	1860	92
Mortgage (convertible)	184,000	6	1860	----
Mortgage	3,209,600	6	1870	78
Mortgage (convertible)	3,586,500	6	1886	67½
Lebanon Valley R. R. (convert.)	1,500,000	7	1886	67½
Real Estate Mortgage	516,450	---	var.	----
Phila., Wilmington and Baltimore:				
Mortgage Loan	688,929	6	1860	----
Mortgage Loan	1,696,500	6	1884	----
Improvement	119,000	6	1863	----
Pittsburg and Connellsville:				
Pittsburg Loan	500,000	---	------	----
Alleghany Co. Loan	750,000	---	------	----
Connellsville Loan	100,000	---	------	----
Mc'Keesport Loan	100,000	---	------	----
Baltimore Loan	1,000,000	---	------	----
Cumberland Loan	200,000	---	------	----
*Pittsb'g, Ft. Wayne and Chicago:				
1st Mortgage (O. and P.)	1,000,000	---	1865	----
2d Mortgage (O. and P.)	750,000	---	1866	----
Income (O. and P.)	1,991,000	---	1873	----
Bridge (O. and P.)	199,500	---	------	----
1st Mortgage (O. and I.)	1,000,000	---	1872	----
2d Mortgage (O. and I.)	380,000	---	1873	----
1st Mortgage (F. W. and Chic.)	1,250,000	---	1873	----
Real Estate (F. W. and Chic.)	498,000	---	1874	----
Mortgage, Consolidated Comp'y	1,229,000	---	1887	----
Pittsburg and Steubenville:				
Mortgage	800,000	†	1865	----
Platte County:				
State (Mo.) Loan	300,000	6	1879	----
Potsdam and Watertown:				
1st Mortgage	800,000	7†	'64-'74	----
Quincy and Chicago:				
1st Mortgage	1,200,000	---	1873	----
Racine and Mississippi:				
1st Mortgage (Eastern Division)	680,000	†	------	----
1st Mortgage (West'rn Division)	757,000	†	------	----
Raleigh and Gaston:				
Coupon	100,000	---	1862	----
Rensselaer and Saratoga:				
1st Mortgage	----------	7	1863	----
Richmond and Danville:				
State (Va.) Loan	600,000	---	------	----
Guarantied by State	200,000	---	1875	96
Mortgage (Coupon)	250,000	---	1850	----
Registered	150,000	---	1860	----
Richmond, Fred. and Potomac:				
Sterling (£67,000)	324,000	---	1860	----
Convertible	54,500	---	1875	----
Dividend Certificates	35,800	---	1857	----
Dividend Certificates	205,800	---	1869	----
Richmond and Petersburg:				
Coupon	159,000	---	1875	----
*Rutland and Burlington:				
1st Mortgage	1,800,000	---	------	----
2d Mortgage	913,500	---	------	----
3d Mortgage	426,400	---	------	----
Sacramento Valley:				
1st Mortgage	400,000	---	------	----
2d Mortgage	[356,000	---	------	----

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1856	----
Mortgage	997,000	7	1866	----
Mortgage	1,000,000	7	1875	----
Dividend	224,000	6	'60-'62	----
Sand'sky, Mansfield and N'wark:				
1st Mortgage	1,290,000	†	------	----
Saratoga and Whitehall:				
1st Mortgage	250,000	7†	1858	----
1st Mortgage (R. and W. Br.)	100,000	7†	1856	----
Unsecured	45,000	7†	1858	----
Seaboard and Roanoke:				
1st Mortgage	300,000	---	1860	----
3d Mortgage	75,000	---	1870	----
4th Mortgage	60,000	---	1856	----
South Carolina:				
State Loan	200,000	5	1868	----
Sterling	183,333	6	1863	----
Sterling	2,000,000	5	1866	----
Auditor's	246,500	7	------	----
Southern Mississippi:				
1st Mortgage	500,000	---	------	----
South-Western (Ga.):				
1st Mortgage	631,000	---	1875	----
*Springfield, Mt. Vern. and Pittsb.:				
1st Mortgage	500,000	---	------	----
2d Mortgage	450,000	---	------	----
*Steubenv. and Ind. (P. C. and C.):				
1st Mortgage	1,500,000	---	------	----
2d Mortgage	900,000	---	------	----
*St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7†	------	----
2d Mortgage	1,535,000	7†	------	----
3d Mortgage (Income)	1,000,000	10†	------	----
St. Louis and Iron Mountain:				
State (Mo.) Aid	2,501,000	---	------	----
St. Louis City Subscription	500,000	---	------	----
St. Louis County Subscription	1,000,000	---	------	----
Carondelet Subscription	50,000	---	------	----
Sunbury and Erie:				
Mortgage	1,000,000	7	------	----
Mortgage	7,000,000	5	------	----
Syracuse, Binghamton and N. Y.:				
---- ----	----------	---	------	----
Terre Haute, Alton and St. Louis:				
1st Mortgage (convertible)	1,000,000	7†	'62-'72	55
2d Mortgage (convertible)	2,000,000	7†	'68-'70	----
1st Mortgage (Bel. and Ill.)	517,000	7†	1873	----
2d Mortgage (Bel. and Ill.)	494,000	7†	1869	----
3d Mortgage (Bel. and Ill.)	503,000	10†	1874	----
Tennessee and Alabama:				
State (Tenn.) Loan	814,000	---	------	----
Mortgage	46,000	---	------	----
Terre Haute and Richmond:				
1st Mortgage (convertible	230,000	7	1866	----
Toledo, Wabash and Western:				
1st M. (L. Er., Wab. and St. Louis)	2,500,000	7†	1865	----
2d M. (L. Er., Wab. and St. Louis)	1,000,000	7†	1869	----
3d M. (L. Er., Wab. and St. Louis)	1,200,000	7†	1891	----
Real Estate (L. Er., W. and St. L.)	300,000	7†	1861	----
1st Mortgage (Toledo and Ill.)	900,000	7†	1865	----
2d Mortgage (Toledo and Ill.)	800,000	7†	1865	----
3d Mortgage (Toledo and Ill.)	600,000	7†	1865	----
*Vermont Central:				
1st Mortgage	----------	---	------	17
2d Mortgage	----------	---	------	----
Virginia Central:				
Mort., guarantied by State of Va.	100,000	6	1880	82½
Mortgage	206,000	6	1872	----
Mortgage, (coupons)	941,000	6	1884	----
Dividend, due 1865, '66 and '75	238,346	6	var.	----
Income (1859 to 1863)	168,382	7	var.	----
---- ----	----------	---	------	----
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	6	1887	----
1st Mortgage	500,000	6	1872	82½
Fractional Mortgage	23,500	6	1868	82½
2d or Enlarged	1,000,000	6	1884	80
Salt Works Br. Mort. due '58-'61	203,000	6	var.	----
3d Mortgage (Income)	431,000	6	1865	79½
Warren (N. J.):				
1st Mortgage	568,500	---	1875	----
Watertown and Rome:				
Mortgage (new bonds)	800,000	7	1880	----
Western (Mass.):				
Sterling (£899,900)	4,319,520	5	'68-'71	----
Albany City (Alb'y and W. S.)	1,000,000	6	'66-'76	----
*Western Vermont:				
1st Mortgage	700,000	---	1861	----
Williamsport and Elmira:				
1st Mortgage	1,000,000	7	1890	----
---- ----	----------	---	------	----
---- ----	----------	---	------	----
Wilmington and Manchester:				
1st Mortgage	596,000	---	------	----
2d Mortgage	1,000,000	---	------	----
Income	177,000	---	------	----
Wilmington and Weldon:				
Mortgage, payable in England	443,555	---	------	----
Sterling, issued in 1858	144,500	---	------	----
Company's, endorsed by State	203,500	---	------	----
Winchester and Potomac:				
Mortgage	120,000	6	1867	----
York and Cumberland:				
1st Mortgage	396,000	†	------	----

Railroad Reports.

RAILROAD COMPANIES will oblige us by sending us copies of their Reports as soon as they are published.

American Railroad Journal.

Saturday, January 28, 1860.

Public Debt of Canada.

Canada is a province of most approved loyalty, of which she has made conspicuous display in imitating the love of the parent country for a good, round, national debt. To be sure, that of the latter has been the growth of centuries, and the result of relations sustained to continental powers, with whom, in times past, she has been in a chronic state of warfare, and was compelled to run up a debt to carry it on, so far exceeding all reasonable bounds of computation, as to forever relieve the public mind of all anxiety about devising any mode for its payment. It is now a part of the English Constitution, to which the people are as much habituated as to the air they breathe, and they have about as much idea of getting rid of one as the other.

Canada, fortunately, has had no wars to carry on. We have no "balance of power" doctrines on this side of the water. She has no fortifications to construct, no ships to build, no army to maintain; and, only recently, a government to support. All these matters have been at the charge of the Home Government. Still, she has a debt of nearly $60,000,000, which is as great a burthen to Canada as $1,200,000,000 would be to the United States, or as $3,800,000,000, (the debt of that country,) to Great Britain. Canada has, say, 2,600,000; the United States, 30,000,000—a population 12 times greater. We presume it is fair to estimate the means of the people of the United States to be twice greater, in ratio to their population, than those of Canada. At the same rate per head, the debt of Canada is equal to $720,000,000 for the United States.

Canada has no coal, which at once puts an end to all hope of ever becoming a great manufacturing country. Coal is the *sine qua non* of material greatness in these days of scientific method. Great density of population in Canada is, consequently, out of the question; and without great density of population, there will never be great accumulation of capital, as men are valuable in ratio to their nearness to each other. Canada can never become a great maritime people, as an embargo rests on her harbors, (always dangerous of approach,) six months in the year.

Now, without any necessity for great expenses for self-protection, and without any great plans for political aggrandizement, it appears to us that Canada, measured by the amount of its public burdens, is old, while yet young. A debt of $60,000,000 would be regarded as a serious burden by the people of the United States. We should at once set ourselves about devising some plan to get rid of it. And such a sentiment is characteristic of all our States, except the two or three which have taken it into their heads to repudiate altogether. The extremes to which they have gone only prove the rule. The only alternative left, to a scheme for the payments of their debts at an early day, (so common with nearly all the States,) was to deny their obligation altogether. There is now hardly a State in the Union in which the contract, creating new liabilities, does not contain provisions which will work out their speedy payment; nor hardly a State whose indebtedness, created some years ago, is not fast melting under the provision of well regulated sinking funds. In this country the strongest repugnance exists against the creation of permanent National or State debts. One reason perhaps is the commercial character of nearly all such as exist. Like all commercial ventures, it is felt that they should be regularly wound up, more especially if they have turned out unfortunately, as many of them have.

The national debt of England does not come in the category of commercial transactions. The nature of its origin creates no suggestion for its payment. Like an ugly habit that it cannot be got rid of, it is defended as a grace or virtue rather than admitted as an offence. The Canadas, in their too great loyalty, we fear have become enamored with this feature of the English constitution, and is rolling up a debt which will always be a serious burden to carry, and a disagreable element in their political affairs.

Connecticut River Railroad.

Statements showing the result of the operation of this road for the year ending November 30, 1859.

INCOME ACCOUNT.

Receipts—		
From Passengers		$121,884 00
" Freight		135,282 73
" Mails		7,319 60
" Express		4,200 00
" Rents and other sources		2,905 62
		$271,592 15
Balance, income, 1858		71,868 26
		$343,460 41
Expenditures—		
Operating expenses		$127,819 46
Miscellaneous expenses and losses		5,547 54
		$133,367 00
Interest		13,066 95
Rent of Ashuelot Railroad one year to Oct. 1, 1859		30,000 00
Dividends of Feb. 1, 1859.	$37,972 00	
Do. Aug. 1, 1859.	44,390 00	
		82,362 00
Balance		84,664 46
		$343,460 41
		DR.
Cost of road and equipment		$1,801,943 80
Ashuelot Railroad equipment		21,841 42
		$1,823,785 22
Materials on hand, as per inventory, viz:		
Mechanics' stock	$14,718 18	
Road stock	4,962 03	
Wood	13,135 50	
Oil	224 27	
		33,039 98
Suspense account		290 41
Ferry stock and real estate		2,898 32
Paymaster		3,919 11
Post Office Department		6,103 87
Balances due from individuals and corporations		6,506 45
Investment, 350 shares, C. R. R. R. stock		16,287 65
Notes receivable, including $17,000, in notes made by W. R. R. corporation		23,137 93
Balances due from passenger and freight agents		19,534 76
Cash in hand and deposited in Banks		24,046 22
		$1,959,549 92

	Cr.
Capital stock paid in, viz:	
For 12,836 shares, old	$1,283,600 00
For 3,075 shares, preferred	307,500 00
	$1,591,100 00
Funded Debt, as follows:	
Notes, due July 1, 1860	5 000 00
Do. Jan'y 1, 1861	5,000 00
Bonds, due May 1, 1862	25,000 00
Do. Nov. 1, 1862	80,000 00
Do. May 1, 1863	25,000 00
Do. Nov. 1, 1863	40,000 00
Mortgage bonds, due Sept. 1, 1878	72,500 00
Profit and loss	84,664 46
Surplus real estate account	6,040 87
Expense bills payable	11,029 28
Balance due	13,401 65
Unclaimed dividends	813 66
	$1,959,549 92

The rate of interest paid on preferred stock is 8 per cent. This stock was created in 1850, and is to become common stock in August, 1860 Upon the common stock a dividend of 4 per cent. is payable Feb'y 1st.

During the present year, the lease of the Ashuelot Railroad will expire. This road has been a drain upon the Connecticut River to the amount of $30,000 annually, it having been run without profit.

The funded debt of the Company is as follows:

Bonds due May 1, 1862	$25,000
Do. Nov. 1, 1862	80,000
Do. May 1, 1863	25,000
Do. Nov. 1, 1863	40.000
Mortgage due Nov. 1, 1878	72,500
	$252,500

The company on the 1st of Sept. 1858, executed a mortgage on the road to secure the payment of bonds to the amount of $250,000, bearing 6 per cent. interest payable in 20 years, for the purpose of returning the bonds soon to fall due. Of these, as before stated $72,500 have been issued.

The officers of the company for the year are:

D. L. Harris, Northampton, *President.*
Seth Hunt, " *Treasurer.*
Wm. B. Brinsmade, " *Superintendent.*

Orange and Alexandria Railroad.

We have the Report of this company for the year ending Sept. 30, 1859.

The earnings for the year have been as follows:

From passengers	$162,197
" freight	84,392
" mails, etc.	13,725
" Manassas Gap Railroad	28,483
Total	$288,297

The current expenses have been as follows:

For maintenance of road	$34,613	
" " " motive power	39,456	
" " " cars	6,898	
" transportation expenses	32,354	
" salaries, office expenses, etc.	14,814	
" other items	3,000	
		131,226
Net revenue		$157,571

General Balance Sheet from Company's Ledger.

	Dr.	
Graduation, masonry, equipm't, etc.	$2,049,210 55	
General charges	193,038 00	
Interest on bonds, preferred stock, scrip dividend, and temporary loans	244,501 89	
Bills and rolls for working road, constructive and new w'k,	$705,116 90	
Freight and other bills outstanding	16,106 08	
Wharf property in Alexandria	23,800 00	
Stock of company, part subject to redemption	69,615 00	
Telegraph line	1,524 67	
Materials on hand, wood, lumber, etc.	29,951 24	
		846,113 89
Cash in banks and available		2,225 79
		$3,335,090 07
Lynchburg Extension:—		
Interest and discount on bonds, 2d issue	$315,272 17	
Do. on 8 per cent. bonds	36,665 36	
Interest on temporary loans, etc.	75,257 62	
		427,195 15
Construct'n & masonry,	1,964,751 53	
Bridges	8,221 27	
Cross-ties	36,691 38	
Iron rails	223,577 39	
Chairs and spikes	22,966 16	
Track laying	9,650 00	
Equipment	4,707 33	
Water stations	251 12	
Right of way	26,787 00	
		2,297,603 18
Engineers' expenses	75,201 96	
Miscellaneous expenses	18,257 55	
Personal property	1,370 00	
Real estate at Lynchb'g	36,097 00	
Stock of State of Virg'a	64,200 00	
		195,126 51
		$6,225,014 91

Capital Stock—	Cr.	
Received from corporations and individuals		$436,616 10
Received from State of Virginia		652,315 28
		$1,088,931 38
Received from corporation of Alexandria and individuals, preferred stock	$140,000 00	
Rec'd from State of Va.	210,000 00	
		350,000 00
Loan on bonds on 1st issue		400,000 00
Bills payable—		
On current business	$18,169 44	
Temporary loans	27,000 00	
Wharf pr'p'rty in Alexandria	10,000 00	
		55,169 44
To credit of agents and others on open accounts	$13,300 67	
To credit on current passenger business	5,180 00	
		18,480 76
Bills and pay rolls to 30th Sept., unsettled		57,500 58
Revenue fund for dividend		49,584 46
Revenue from passengers, freight and mails		1,536,797 98
Rent of Alexandria property		377 08
Profit and loss account		8,202 98
		$3,565,044 66
Lynchburg Extension:		
Stock subscript's paid.	$542,236 27	
Bonds of Company, six per cent. sold	1,055,500 00	
Do. eight per cent. sold	461,378 70	
Loan from State of Va.	400,000 00	
Bills payab. to contr't'rs and temporary loans.	136,508 53	
Rent of Lynchb'g property	491 00	
To credit of contractors on construction and cross-ties	53,599 42	
Do. engineers.	3,487 95	
Do. C. Congreve & Son, iron rails and duties.	36,768 38	
		2,689,970 29
		$6,255,014 91

This road is now opened for its whole length from Alexandria to Lynchbugh, a distance of 166 miles, and completing a direct line entirely through the State, in connection with the Virginia Central, (which is used for 21 miles,) and the Virginia and Tennessee, 205 miles. The completion of the Lynchburg Extension is a most important event, not only to the Orange and Alexandria Railroad, but to the railroad system of the country. The Mississippi Central Railroad is also on the eve of completion, opening a direct route by railroad to New Orleans. These connections cannot fail to be most valuable to the Orange and Alexandria Railroad, and must, for the current year, add very largely to its receipts, as it now forms the central portion of a direct line uniting the very extremes of the country.

The officers of the Company for the current year are:

President—J. S. Barbour, Jr.
Superintendent—H. W. Vandegrift.
Treasurer—James H. Reid.

Pacific Mutual Insurance Company.

We give in another column the statement of this company for the past year, showing the most satisfactory results. This company was established for an exclusive mercantile business, (principally for the Importers and Jobbers,) and no risks are taken by the year, or upon the hulls of vessels.

All the net earnings of the company are divided among its policy-holders, they receiving the full benefit of its profits. No reservation of profits is made for the benefit of parties not directly interested in the business of the company as dealers.

This company has returned to its dealers, in dividends, namely: 1856, 37 per cent.; 1857, 20 per cent.; 1858, 20 per cent.; in 1859, 43 per cent.; and in 1860, 30 per cent., and will redeem its second dividend, issued in 1857, in cash, on and after Tuesday, the 7th day of February next. By the principle upon which this company is conducted, the Insurer simply pays the general risk of insurance and the cost of conducting the operations of this company—the profits accruing the insurers, in many other companies, being returned to him.

Municipal Subscriptions to Railroads in Wisconsin.

The Madison *Journal* contains the following in reference to the County and Town subscriptions in Wisconsin to Railroad Companies:

The opinion of the Supreme Court in the case of Bushnel agt. The Town of Beloit, announced on Wednesday by Judge Cole of Madison, and concurred in by the other Judges, settles the constitutionality of legislative acts authorizing counties, towns, and municipal corporations, to issue bonds in aid of railways and similar improvements.

The town of Beloit, in conformity with an act of the Legislature, by the consent of a majority of its legal voters, issued bonds in aid of the Racine and Mississippi Railroad. These bonds were made transferable in the usual manner. The town of Beloit resisted the payment of the interest due upon them, mainly upon the ground that the Legislature had no power, under our Constitution, to pass the act authorizing the issue of bonds for such purposes. Bushnell, the respondent, a holder of some of the bonds in question, brought a suit against the town for the payment of the interest.

Judge Cole, in his opinion, sustains the decision of the Court below, affirming the decision of the Legislature, under our Constitution, to authorize such issues of bonds, and very thoroughly discusses the whole subject in a lengthy and able argument.

New York and Erie Railroad.

Below will be found the last monthly statement of Nathaniel Marsh, Receiver, in account with the New York and Erie Railroad Company.

1859.	RECEIPTS.		CR.
Nov. 30.—To balance per last report..			$176,736 77
Less bills for supplies omitted			14 81
			$176,721 96
Dec. 31.—Rents collected.		$1,070 00	
Old rails sold...		20,003 39	
Discount on currency		66 25	
Accept'ces issu'd for wood.....		2,404 14	
Ontario St'b't Co.		27 20	
North'n R.R. Co.		111 60	
Car keys loaned conductors...		10 00	
Charter of st'm'r		300 00	
Damaged goods, etc., sold.		555 35	
Freight & pass. receipts		608,791 54	
			633,339 47
Total.....			$810,061 43
Dec. 31—To balance on hand			$27,175 00

1859.	DISBURSEMENTS.	DR.
Dec. 31.—By interest on 1st mortgage bonds		$151,725 00
Paymasters for expenses ..		222,321 84
Charges on freight		164,308 98
Long Dock Co. for interest,		30,466 08
Acceptances for supplies ..		4,856 64
D. S. Magee for coal		702 00
Winslow, Bush & Strong account judgment		15,000 00
Rent Chemung R. R.....		2,500 00
Rent Elm., Jeff. Can. R. R.		2,083 34
Sundry ticket balances ...		9,402 75
Interest and account and discount on unc'd money,		428 99
Sundry bills for supplies, etc.		123,545 81
Amount applicable to pay interest on 1st mort. bonds		55,545 00
		$782,886 43
Balance on hand.....		27,175 00
		$810,061 43

NATHANIEL MARSH, Receiver.

New York, January, 1860.

Griffin and North Alabama Railroad.

On Wednesday morning, the 11th inst., says the *Griffin Union* of the 13th, the grading of this new railroad was commenced. Messrs. Brown & Holman have taken the first contract, beginning at Griffin. Other contracts will commence in a few days, and by the 1st of February we expect to see the whole line under way as far as Newnan.

Emigrant Travel on the Pennsylvania R. R.

During the year 1859, the Pennsylvania Railroad Company transported over their road 14,359 emigrant passengers, most of whom were destined to points west of Pittsburg. A large number of them settled in Kansas and Iowa. Of the whole number, 7,620 came from New York, having been landed in that city, and choosing the Pennsylvania route as the most economical and expeditious. The entire number had with them 387,656 pounds of extra baggage. The following exhibits the number of passengers for each month:

Months.	Number.	Months.	Number.
January.....	712	July	1,041
February.....	870	August.....	1,151
March	1,328½	September	1,237
April.....	1,380	October	1,256
May	1,854	November	1,256
June.....	1,893½	December	880
Making a total of.....			14,359

Lehigh Valley Railroad.

The annual meeting of this company was held at Philadelphia a few days since. The following is an abstract of the report:

RECEIPTS.

From coal transportation.....	$391,766
" Passenger, express and mail.....	68,161
" Miscellaneous freight.....	65,937
Total	$525,866

EXPENDITURES.

For coal transportation	$160,895
" passenger, express and mail.....	28,085
" miscellaneous freight.....	22,991
Total	$211,971
Balance net earnings	333,896
Against which has been charged—Interest on bonds.....	85,020
Current interest.....	8,257
Salaries and office expenses.....	6,359
Dividend	117,518
Total	$217,518
Leaving a credit balance of.....	96,375

The whole amount of coal transported over the road was 577,651 tons, against 471,029 tons last year—showing an excess this year of 106,622 tons. This amount was distributed as follows:

	1859—Tons.	'58—Tons.
To the Belvidere Delaware R. R.	131,152	96,141
" Central Railroad.....	182,222	122,000
" North Pennsylvania R. R.	77,483	66,123
" East Pennsylvania R. R..	3,579	.....
" Catasauqua Railroad ...	4,384	4,012
" Morris Canal.....	4,688	5,870
Delivered on the line of road...	174,143	176,883
Total.....	577,651	471,029

Of the whole surplus of the receipts over the expenditure, $62,797 06 has been used in new construction, and the balance applied to the liquidation of the debts of the company. The total capital of this company is $1,966,350, upon which the net earnings are about 11 per cent. Very few coal transportation companies in this State can show such a flattering and encouraging result. Mr. J. G. Fell is the President of the road; Mr. J. N. Hutchinson, Secretary and Treasurer. Managers—Asa Packer, William H. Gatzmer, John T. Johnston, R. F. Stockton, E. A. Packer and David Barnett.

The Canals--Report from the State Engineer.

The report of the State Engineer upon the Canals of the State was sent to the Legislature yesterday (Friday.) The State Engineer estimates the cost of completing the canals, as follows:

Erie Enlargement.....	$535,626 30
Oswego Canal.....	116,575 29
Cayuga and Seneca.....	107,302 35
Champlain Locks.....	75,970 35
Black River Canal.....	60,430 00
Genesee Valley Canal	24,374 00
" " Extension	15,800 00
Engineering, 10 per cent.....	93,697 88
Contingencies	150,000 00
Land Damages.....	500,000 00
	$1,679,686 69

The estimate presented in the State Engineer's Report last year made the cost of completing the Canals, $2,900,540 37. The estimate this year reduces this amount, after deducting the work done since the last report, $49,039 69.

All the work remaining to be done is under contract except to the amount of $301,170 90.

On the Erie Canal, the report says seven feet of water can be secured the entire length, at the opening of navigation next spring, and the whole work can be done by the spring of 1861—if the funds are provided by the legislature. The report says the Canal may be completed between Albany and Lockport, and seven feet depth of water (without the full width of channel) be secured from Lockport to Buffalo for $274,250.

On the subject of lengthening the locks as has been proposed, the report thinks it inexpedient—at least till the enlargement is finished and its capacity tested.

Indianapolis and Cincinnati Railroad.

The passing of the usual January dividend by this road has created some inquiry by foreign stockholders into the causes. From a personal knowledge of the management of the affairs of the company, we can enlighten the public and the stockholders. We can safely say this, that no road in the country is in a more sound and reliable condition than the Indianapolis and Cincinnati.

Within the past fifteen months the company has removed all its bridges, with a single exception—seven in number. Timber abutments have been taken out, and solid stone masonry substituted. The old bridges were of poplar and oak; the new ones are of pine. The old abutments were of wood; the new ones of stone from the flat-rock quarries. No road in the country has been more thoroughly equipped in this important provision for the safety of the traveling public.

During the year, about a mile of track has been constructed to an important stone quarry, at an expense of some $10,000. The amount of stone shipped during the past year exceeded twelve thousand tons. A large amount is already quarried, ready for spring shipment. The freights of the first six months of the year will probably pay one-half the expense of the track. The stone is in active demand, and finds a ready sale. The new jail will be mostly built of materials procured from these quarries.

The company has also erected a car house at Indianapolis for all the cars upon the road, and five new wood-sheds at convenient intervals along the line. Depots have been built at all the stations, together with an excellent eating-house at Morris, the latter a very desirable acquisition, as we have personal reasons to know. The company has built and purchased twenty-four acres to accommodate the stone trade, and materials for some forty more. During the year, they have liquidated some $40,000 of ten per cent. construction bonds, and have renewed and painted all the water stations on the line.

The fiscal year of this road ends on the 1st of January. The earnings of the year 1858 were about $449,000. The receipts of 1859 show a falling off of perhaps $35,000. The principal reason for this deficit is found in the fact that the previous year exhibited almost an entire failure of the corn crop of Indiana, the great staple of the inward freights. Of course, as a natural consequence, there was a falling off in the outward freights, the demand for merchandise and manufactured articles being correspondingly lessened by the ability of the usual purchasers to pay. The local business fell off in a corresponding ratio.

It seems to have been the policy of the management of the road to maintain its position as a leading line to the Northwest. Within the next two or three years there will be a desperate struggle of the several railroads for the supremacy, and the roads which maintain themselves in an independent position can always control its connections. In such a position we regard the Indianapolis and Cincinnati road. The management has given much attention to its local traffic, fostering and encouraging little towns along the line, and developing the resources of the country as far as possible. This may be regarded as a permanent investment, and will eventually yield a handsome return, and will pay more than a dividend just at present.

The future of this road is encouraging. Nothing can retard its permanent prosperity. It is in as good (if not better) condition as any road in the West, and, what is still better, the local management has the confidence of the directors and the stockholders. They confidently believe that if they do not receive a dividend to-day, that the money has been judiciously and carefully expended, and that the return in the future will be adequate to their most sanguine expectations. As a

leading line out of our metropolis, the Indianapolis and Cincinnati occupies an important position, and a year hence will defy all competition. Our own observation during the week past, justifies this strong expression of opinion of its future prosperity. We speak what we believe, and time will justify the unqualified endorsement of the management of this important tributary to the trade of Cincinnati.—*Cincinnati Enquirer.*

Cincinnati Stock Sales.

BY KIRK & CHEEVER.

For the week ending January 24, 1860.

BONDS.	Per cent.
Little Miami, 1st Mort.	6s....84-85 and int.
Covington and Lexington, 2d Mortgage	7s....65 and int.
Ohio & Miss., E. D., Construction	7s....23-24 flat.
Cinc., Ham. and Dayton, 2d Mortgage	7s....84-85 flat.
Indianap. & Cincinnati, do. do.	7s....78-80
STOCKS.	
Cincinnati, Hamilton & Dayton	Ex Div. 62½-63
Columbus and Xenia	82
Little Miami	83-83½

Railroad Earnings.

The traffic of the Great Western Railway of Canada for the week ending Jan. 13, 1860, was as follows:

Passengers	$13,891 84
Freight and live stock	19,512 96
Mails and sundries	1,477 34
Total	$34,791 15
Corresponding week last year	30,034 71
Increase	$4,756 43

The receipts of the Grand Trunk Railway of Canada for the week ending Jan. 14, were $52,334 25
Week ending Jan. 15, 1859 ..... 32,880 17

Increase $19,454 07
Total traffic from July 1st, 1859 .... $1,475,610 55
Same period last year 1,238,654 50

Increase $236,956 05

The earnings of the Catawissa, Williamsport and Erie Railroad, in December of the past three years, have been as follows:

For December, 1857		$19,541 56
Less rent of connecting roads		3,926 43
		$15,615 13
For December, 1858	$25,005 66	
Less rent of connect'g roads	4,088 57	
		$20,217 09
For December, 1859	$26,969 48	
Less rent of connect'g roads	4,466 16	
		$22,503 32

The earnings of the Illinois Central Railroad have been:

	1858-'59.	1859-'60.
September	$218,860 58	$246,829 05
October	184,776 09	245,391 57
November	156,037 60	250,742 19
December	153,998 73	192,321 74
January, 2 weeks	100,336 31	86,875 55
Total	$774,009 31	$1,022,161 10
Increase for 4½ months		$248,151 79

During the same period from 1st September to the 16th January, the cash collections in the Land Office have been $257,445 45

For September, 1859	$55,418 07	
October, "	56,674 25	
November, "	54,042 24	
December "	61,310 89	
2 weeks Jan'y, 1860.	80,0.0 00	
		257,445 45

Raritan and Delaware Bay Railroad.

Ten miles of this road, from Keyport to Red-bank, was opened for public use a few days since. The whole road will be about 90 miles.

Brooklyn City Railroad.

The annual report of the Brooklyn City Railroad Company, to September 30, 1859, states that the entire liability of the Company is $1,000,000 capital stock, upon which regular dividends of 4 per cent. semi-annually are paid. The business for ending Sept. 30, 1859, was 20 per cent. larger than in 1858, the road carrying 9,261,393 passengers, against 7,705,839 the previous year. Of the surplus of $88,203 10 on hand August 1, the earnings of 1859 contributed $49,856 37:

COST OF ROAD AND EQUIPMENT, NOV. 30, 1859.

	By last report.	By present report.
For superstructure, including iron	$578,153 06	$581,024 87
Stables, &c. including land	172,198 66	174,972 96
Bridges	3,107 02	3,107 02
Land damages	80 00	80 00
Passenger cars	81,252 75	90,120 23
Engineering	5,331 15	5,321 15
Horses, mules, harness, &c.	136,862 37	138,413 39
Real estate, (houses and lots)	7,167 84	7,167 84
Stages, sleighs, &c.	54,696 62	53,900 88
Total cost of road & equipment	$1,033,839 97	$1,054,107 36

EARNINGS.

From passengers	$463,069 68
From other sources	8,372 55
Total	$471,442 23

PAYMENTS OTHER THAN FOR CONSTRUCTION AND REAL ESTATE.

For operating road	$346,037 39
" new small cars	8,867 50
" dividends, 8 per cent	80,000 00
To payments to surplus fund	40,856 37
Total	$484,761 26
Total surplus Aug. 1, 1859	88,203 10

The business of the road for the past four years has been as follows:

	Passengers carried.	Passenger earnings.
1855-6	6,552,582	$327,629.21
1856-7	7,575,823	378,791.16
1857-8	7,705,839	385,291.96
1858-9	9,261,393	463,069.68
	Operating expenses.	**Miles run.**
1855-6	$252,465.50	1,665,786
1856-7	287,823.97	1,391,215
1857-8	288,771.22	1,994,185
1858-9	346,037.39	2,496,968

The length of the road laid is 20.1 miles double track. The number of first-class passenger cars is 100, and of omnibus passenger cars 17.

The Victoria Bridge.

The great Victoria Bridge at Montreal has been tested by the English engineers sent out for that purpose, and their report, announcing the result and advising the company to accept the bridge, has been published. A train heavily loaded and long enough to cover two of the tubes, of which the bridge is composed, from end to end, was run through the bridge, stopping in the different tubes so as to test each span. The load upon the bridge was about one ton for every foot of length. A steel wire was extended through the bridge, tightly drawn, and from this the deflection of each span was measured. The train standing on the first tube only, depressed that span ⅞ of an inch, and raised the next one ⅜ of an inch; standing upon both at once, both were depressed ¾ of an inch; and so with the other spans except with the long central tube, when the deflection was one inch and three-eighths. In all cases the tubes returned to their proper position, the load being removed.

Contract for Railroad Iron.

The Crescent Iron Works, at Wheeling, Va., have contracted to manufacture 4,500 tons of tubular T rails for the Memphis branch of the Louisville and Nashville Railroad.

RAILROAD IRON.

90 TONS English of the pattern for sale by

GRUND & WESTERVELT,
January, 1860. 118 Pearl st.

Second Hand Freight Engine.

CYLINDERS, 16x20. 141 Flues, 6 Drivers, 4 ft. Boiler, 42 inches. Price, $3,000. For sale by
WILLIAMS & PAGE,
4t1 44 Water st., Boston.

New FIRST CLASS FREIGHT ENGINE.

Cylinder 16x24. Wheels 5 feet. Fire-box 4 ft. 1½ in. long, and 5 ft. 6 in. deep. 138 flues 12 ft. by 2 inches. Boiler 48 inches. Tender 2,000 gallons. For sale low by
WILLIAMS & PAGE,
3m52 44 Water st., Boston.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMP'Y,
44 Exchange Place.
New York, 1st June, 1859.

STEEL, FILES, ETC.

R. GROVES & SONS,
SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted **Cast Steel,** superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, **Cast Steel Files,** of high reputation, especially adapted for the use of Machinists, and **Saws** and **Edge Tools** of all kinds.
A stock of the above goods constantly on hand.

CORPORATE MARK **USE**

CHAS. CONGREVE & SON, Agents,
13 Cliff street, N. Y.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the **CAMBRIA IRON COMPANY,** situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for **RAILS** of any required pattern or weight, on the most liberal terms.

PHILADELPHIA OFFICE, NORTH PENNA. R. R. BUILDING, **No. 407 Walnut st.**

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
BOSTON, June, 1851. **29 Central Wharf.**

RAILROAD IRON.

CONTRACTS for **RAILS,** at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

OFFICE OF THE PACIFIC MUTUAL INSURANCE COMPANY,

TRINITY BUILDING, 111 BROADWAY,

NEW YORK, January 18, 1860.

The following statement of the affairs of the Company is published in conformity with the requirements of Section 12 of its Charter:

Outstanding Premiums, January 1, 1859	$145,805 42
Premiums received from January 1 to December 31, 1859, inclusive	823,653 95
Total Amount of Marine Premiums	$969,459 37

This Company have issued no Policies, except on Cargo and Freight for the voyage.

No Risks have been taken upon Time or upon Hulls of Vessels.

Premiums marked off as Earned, during the period as above	$810,856 56
Less Return Premiums	55,872 16
Net Earned Premiums	$754,984 40
Paid for Losses, including an Estimate of Claims ascertained, but not yet due, less Savings, etc.	$412,163 83
Re-Insurances, Commissions and Expenses	99,401 68
	511,565 51
	$243,418 89
Add Profits undivided December 31, 1858	4,777 19
Net Profits	$248,196 08

The Assets of the Company on the 31st December, 1859, were as follows, namely:

Cash in Bank	$123,504 07
New York City Bank Stocks, and State Stocks	216,275 00
Loans on Stock, drawing interest	181,975 64
	$521,754 71
Premium Notes, and Bills Receivable	317,594 84
Subscription Notes in advance of Premiums	139,428 25
Scrips of sundry Mutual Insurance Comp., Re-insurance and other Claims due the Company, estimated at	27,189 09
Total Assets	$1,005,966 89

In view of the above results, the Board of Trustees have this day resolved to pay a Dividend of Interest of SIX per cent. in cash on the outstanding Certificates of Profits, to the holders thereof, or their legal representatives, on and after Tuesday the 7th day of February next.

The Trustees, after reserving nearly SIX HUNDRED THOUSAND DOLLARS of profits, have further resolved, that the whole of the OUTSTANDING CERTIFICATES OF THE COMPANY, OF THE ISSUE OF 1857, be redeemed and paid to the holders thereof, or their legal representatives, on and after Tuesday, the 7th day of February next, from which date all interest thereon will cease. The Certificates to be produced at the time of payment, and canceled.

Also, Resolved, That a Dividend of THIRTY PER CENT. be declared on the net amount of Earned Premiums for the year ending December 31st, 1859, for which Certificates will be issued on and after Tuesday, the 7th day of February next.

By order of the Board,
BENJAMIN A. ONDERDONK, Secretary.

TRUSTEES.

A. C. RICHARDS,	J. K. MYERS,
SHEPPARD GANDY,	WILLIAM KENT,
W. M. RICHARDS,	DAVID P. MORGAN,
G. D. H. GILLESPIE,	BYRON SHERMAN,
C. E. MILNOR,	JEHIAL READ,
MARTIN BATES, JR.,	W. M. BLISS,
FREDK. B. BETTS,	A. S. BARNES,
MOSES A. HOPPOCK,	J. E. HANFORD,
SANFORD COBB, JR.,	THOMAS EAKIN,
W. H. MELLEN,	ALEX'R M. EARLE,
T. B. MERRICK,	H. L. ATHERTON,
C. HADDEN,	JOHN A. HADDEN,
L. P. MORTON,	GEO. C. WETMORE,
F. W. MEYER,	P. H. VANDERVOORT,
JOHN B. ARTHUR,	ALFRED EDWARDS,
A. WESSON,	WILLIAM LECONEY,

ALFRED EDWARDS, President.
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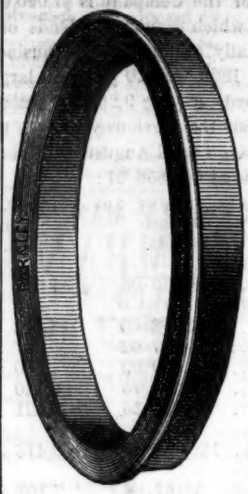

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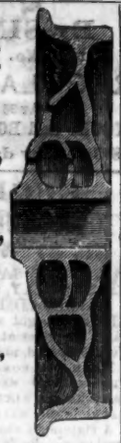

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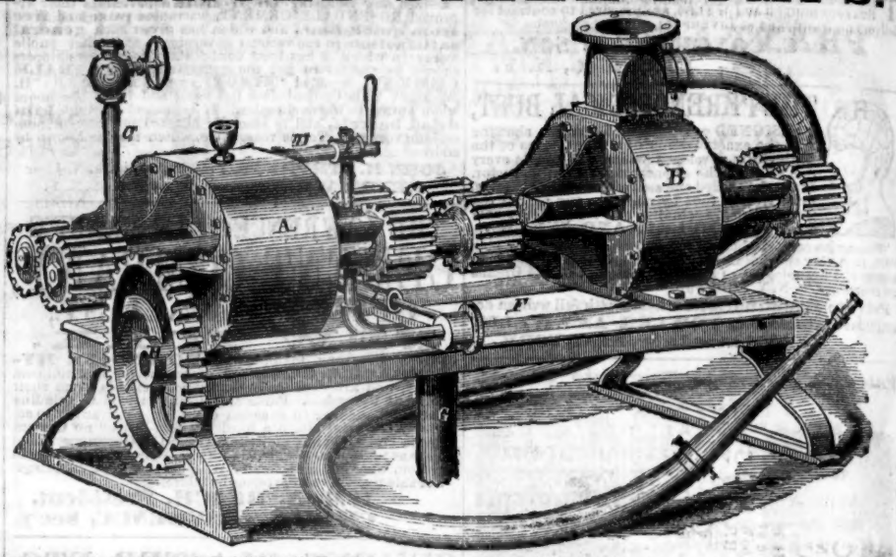

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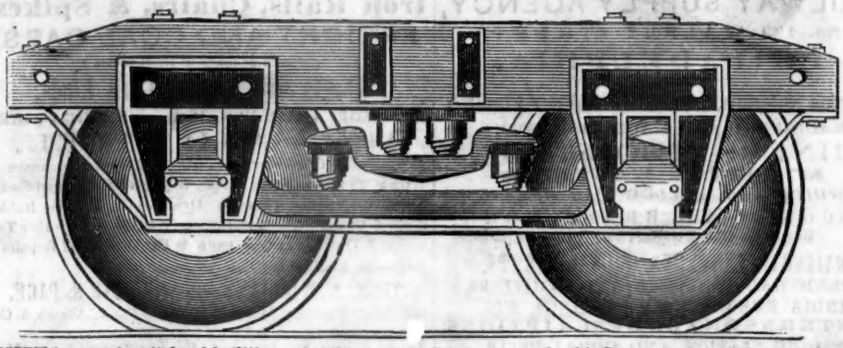

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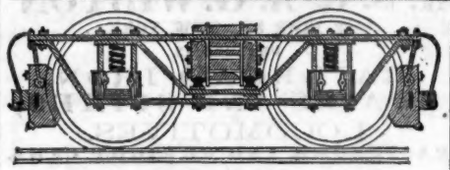

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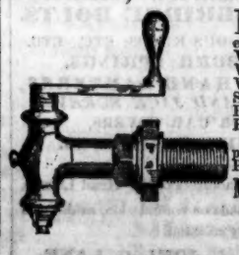

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